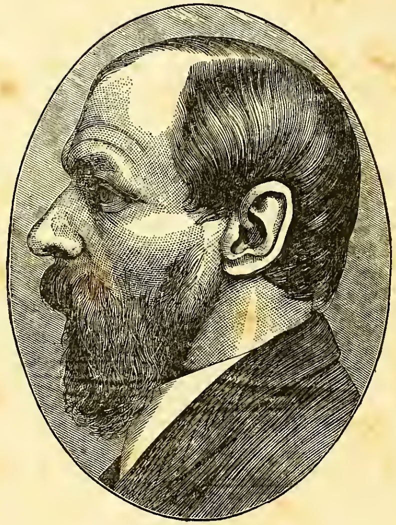
BOSTON MEDICAL LIBRARY
in the Francis A. Countway
Library of Medicine ~ *Boston*

Digitized by the Internet Archive
in 2010 with funding from
Open Knowledge Commons and Harvard Medical School

http://www.archive.org/details/naturesrevelatio00simm

THE AUTHOR.



J. SIMMS, M.D.

DR. JOB T. DICKINS
8 Pleasant street, - Newburyp
3,

NATURE'S

REVELATIONS OF CHARACTER;

OR,

PHYSIOGNOMY ILLUSTRATED.

A DESCRIPTION OF THE
MENTAL, MORAL AND VOLITIVE DISPOSITIONS OF MANKIND, AS
MANIFESTED IN THE HUMAN FORM AND COUNTENANCE.

BY JOSEPH SIMMS, M.D.

THIS WORK IS THE FRUIT OF NEARLY TWENTY YEARS' DILIGENT OBSERVATION
OF NATURE, AND PRESENTS A NEW AND COMPLETE ANALYSIS AND
CLASSIFICATION OF THE POWERS OF THE HUMAN MIND AND
BODY, TOGETHER WITH THE PHYSIOGNOMICAL
SIGNS BY WHICH EVERY FACULTY
IS DISCLOSED.

Complete in One Volume.

AND ILLUSTRATED BY TWO HUNDRED AND SIXTY ENGRAVINGS.

"In Mystic Characters, our Features bear the Motto of our Souls."—SIR THOMAS BROWNE.

PRINTED FOR THE AUTHOR.

D. M. BENNETT,
LIBERAL AND SCIENTIFIC PUBLISHING HOUSE
141 EIGHTH STREET, NEAR BROADWAY,
NEW YORK.

BOSTON MEDICAL
MAR 30 1917

THIRD EDITION OF

NATURE'S REVELATIONS OF CHARACTER;

OR,

Physiognomy Illustrated.

REVISED AND REPRINTED IN 1879.

Entered according to act of Congress in the year 1872 by J. Simms, M.D., in the office of the Librarian of Congress at Washington, U. S. A.

Entered according to act of Parliament in the year 1872 by J. Simms, M.D., in Stationers' Hall, London, England.

PREFACE.

THE work here given to the public is the fruit of nearly twenty years' observation and study, in the course of which the discoveries have been made which are herein revealed and formed into a new system of Physiognomy, strictly in accordance with the anatomical structure of the human body. While I am convinced of the vast importance of the study of Physiognomy, I am further persuaded that if these principles were fully understood and practised, the consequence would be, not only a regeneration of the human beings now living in the world, but the generation of others far superior to those who now inhabit the earth, and many of whom have come upon it as unwelcome guests. Vice, easily detected, would hide its head, and gradually disappear; while the human race would become refined and ennobled, mentally, morally, and physically, by a true understanding of that which improves it on the one hand, and deteriorates it on the other. The love which I bear towards my species, my intense desire to see the human race what it ought to be, and is capable of becoming, has prompted me to give this publicity to these discoveries in Physiognomy. They include the mental, moral, and volitive dispositions of mankind, as manifested in the human form and countenance, together with the signs and principles of each faculty; and they are illustrated by two hundred and fifty Engravings.

It has been necessary to coin a number of new words to designate newly discovered faculties, seeing that the English language contained no single terms to express them. To Americans it is necessary also to explain that the work having been printed and stereotyped in Britain, the old style of spelling used in that country has necessarily been employed.

J. SIMMS, M.D.

CONTENTS.

INTRODUCTION.

The term Physiognomy—Earliest Conditions of the Science—Its Progress—Greek Philosophers—Roman Authors—Middle Ages—Authors of the 16th, 17th, and 18th Centuries—Lavater—Act against Physiognomists in George the Second's Reign—Surnames taken from Physiognomical Peculiarities—Interest Attaching to the Science—Every Variation of Bodily Form or Colour corresponds to some Mental Characteristic—The Variety contributes to Unity—Causes of Physiological Phenomena—Development in an Infant—Effects of Various Tempers on Feature—Physiognomy, a sure and cheap Science, slightly understood by all, thoroughly to few—Its Benefits—Importance to the Merchant—The Clever Shopman instinctively a Physiognomist—how it leads him to act towards various customers—Hairdressers—Anecdote of a Clever Shopman—Universal Application of the Science—Evil Results from Ignoring it—The Pleasure it Affords—The Moral Results of its Cultivation, ... 3–38

FORMS OF THE HUMAN BODY.

Question of Human Responsibility—Ancient Classification—Author's Classification and Nomenclature: Abdominal Form; Thoracic; Muscular and Fibrous; Osseous or Bony; Brain and Nerve—Possibility of Change from one to the other, ... 39–44

THE ABDOMINAL FORM.

The Facts of Nature Obvious, but the Reasons Obscure—Earliest Geological Animals Abdominal—so were the Earliest Men—Characteristics of the Abdominal Form—Its Disadvantages—Anecdote—Food Indisposes to Mental Activity—How to Cultivate the Abdominal Tendency, or Repress it, ... 45-53

THE THORACIC FORM.

The Thorax, What—Signs of the Thoracic—Mountainous Regions Favourable to it, and why—Its Advantages and Disadvantages, . 54–59

THE MUSCULAR AND FIBROUS FORM.

Not Dependent on Size—All Art is an Imitation of Nature—Two Sets of Muscles—Exercise the Great Developer—Dr. Windship—Pure Air

Needful—Eminent Men who were Muscular—Legitimate Rest Needful—Examples of Life begun in Poverty—Modern Aversion to Labour—Old English Runners—Gymnastics among the Ancients Causes of Muscular Degeneracy—Signs of Muscular Force, . . . 60-74

The Osseous or Bony Form.

Bony Structure gives Firmness—Causes; Food, Exercise—Honesty allied to the Bony, Examples—Signs of this Build—Same holds good in Animals—Structure Hereditary—Early Culture of Bone—Men of Genius who combined the Bony and Brain Forms, ... 75-82

The Brain and Nerve Form.

Its Relation to the Others—Signs—Dr. Spraker—Changed Appearance of a Boy through Study—Brain Form Exhausting—Is Restored by Sleep—and Physical Labour—Injured by Stimulants or Accidents—Astley Cooper's Anecdote—Brain Injured by Overfeeding—Authors of the 18th Century Abstemious from Poverty—Overworking the Brain—Hugh Miller—Children Overtasked by Teachers, . . . 83-95

Localizing Faculties.

Demolitiousness and Concealativeness in Nature—Not Localized—Tendency to Ascribe Locality to Faculties—Ancient—Modern—So with Deity—Meaning of the term Faculty—Human Faculties are not Localized, but their Signs are, ... 96-102

The Number of Faculties in the Human Mind.

Matter and Mind Distinct—Mind gives Greatness to Matter—No Certain Number of Mental Faculties—Higher Faculties are Products of Cultivation—Prayer—Christianity—Music—Language—Faculties Propagate—Are not alike in All—Newton, Columbus, Davy, Stephenson—New Faculties may be Discovered in Future Times, . . . 103-109

The Human Faculties, and the Prinicples on which they are Founded.

A Faculty, What?—Variety in Strength rather than Number—Every Faculty Two-fold—Five Classes Dependent on Bodily Structure: The Selfish Will; the Active and Courageous; the Opposing; the Stedfast; the Opinionative—Mental Faculties derive Support from Corresponding Bodily Materials—Appetite—Imitation—A Man can Perform Nothing but from Elements in Himself—Square, Round, Coloured, &c.—Limit to the Cultivation of Faculties, ... 110-122

CLASS I.—THE SUPPLYANT POWERS.

ABDOMINAL FORM PREDOMINANT.

Acquiesciveness.

Underlying Principles—Indications of Acquiesciveness—Causes, . 123-125

ANIMALIMITATIONALITY.

Mouth the Principal Seat, ... 126

AQUASORBITIVENESS, OR LOVE OF WATER.

Its Use—Cause and Operation—Signs, ... 127

PHYSIOELPIDICITY, OR HOPE RELATING TO BODILY WANTS.

Signs—How Produced, ... 128

GRASPATIVENESS, OR LOVE OF GAIN.

Signs—Cause, ... 129

ASSOCIATIVENESS, OR DESIRE OF COMPANY.

Signs—Necessary Bodily Conditions, ... 130

APPETITIVENESS, OR PROPENSITY TO EAT.

Signs—Reason, ... 131

RETALIATIVENESS, OR DISPOSITION TO RETURN LIKE FOR LIKE.

Signs—Examples—It Returns Good as well as Evil—Requires the Muscular as well as Abdominal—Nature of Fluids to be Reflective, . 132, 133

CLASS II.—THE PROTECTIVE ABILITIES.

THORACIC ASCENDANCY.

PAGE.

SENTINELITIVENESS, OR DISPOSITION TO WATCH.

Signs—How Developed, ... 134

MORIVALOROSITY, OR MORAL COURAGE.

Signs—Developed from the Thorax, and manifested in the Nose, . 135

ELEVATIVENESS, OR UPWARD TENDENCY.

Signs—Origin Twofold—Growth Upward and Outward, . . 136

OLFACTIVENESS, OR SENSE OF SMELLING.

Signs—Reaching Powers of the Nose, how increased—Telescope, . 137

RESISTATIVENESS, OR DISPOSITION TO WITHSTAND.

Signs—Combative Animals, ... 138

ASSAULTATIVENESS, OR DISPOSITION TO ATTACK.

Sign—A Bow-shaped Nose, ... 139

WATCHFULNESS.

Signs, ... 139

SUSPICIOUSNESS.

Signs—Crow a good Example—Owl the contrary—How the Mental Watchfulness Works the Outward Sign, ... 140

LOCOMOTIVITY, THE DESIRE AND POWER OF RAPID MOVEMENT.
Signs—Greyhound, Pike, Sloth—Long-shaped Animals Swift, and *vice versa*, ... 141
INQUISITIVENESS.
Signs—Wedge-shaped Face and Protruding Nose indicative of a Prying Disposition, ... 142
AMBITIOUSNESS, OR DESIRE OF PRE-EMINENCE.
Coarse, Strong, Well-defined Features—Napoleon the Great, . 142
AUTOHEGEMONY, OR SELF-ESTEEM.
Disposition to Draw the Head Backwards and Upwards—Beau Brummel—Immanuel Kant, ... 143–145

CLASS III.—THE PROPAGATIVE INCLINATIONS.

MUSCULAR AND FIBROUS ASCENDANCY.

TEMPORINATURALITIVENESS, OR THE POWER OF APPRECIATING THE LAPSE OF TIME.
The Heavenly Bodies Circular in their Forms and Motions - Good Judges of Time round-faced, ... 146
PHYSIOVALOROSITY, OR BODILY COURAGE.
Signs—Lion—Giraffe and Rabbit—An English Pugilist—A Professor of Belles Lettres, ... 147, 148
SOPHISTICALNESS, INCLINATION TO FALSE REASONING.
Signs, ... 149
PLAYFULNESS.
Signs—How Developed, ... 150
INTERMUTATIVENESS, OR CAPACITY OF SUBSTITUTING ONE THING FOR ANOTHER.
How Manifested, ... 151
PHILOMONOTOPICALNESS, OR THE AFFECTION FOR ONE PLACE.
Signs—Locative Habits, how produced, ... 151
TONIRECEPTIONALITY, THE ABILITY FOR APPRECIATING SOUNDS.
Round, Outstanding Ear—Roundness of Musical Sounds, . 152, 153
CONCEALATIVENESS, OR THE INCLINATION TO HIDE.
Signs—Flexor or Closing Muscles, ... 154
ECONOMOSITY, OR MANAGING FACULTY.
Signs—Franklin, ... 155
CURVATIVENESS, OR THE CAPACITY FOR APPRECIATING CURVES.
Signs—The Curved Principle Inherent, ... 156
ACCUMULATIVENESS, OR DISPOSITION TO GATHER.
Signs—Earthy Construction, ... 157
MONOEROTICITY, THE DISPOSITION TO LOVE ONE ONLY.
Signs—How Resulting, ... 158

VOLUNTATIVENESS, OR STRENGTH OF WILL.

Signs—George III.—How Developed, ... 159

MERRINESS.

Signs—And the Principles of its Manifestation, ... 160

PROVIDENTNESS.

Signs—How Originating—and Demonstrated, ... 161

CONTRATIVENESS, OR DISPOSITION TO ASSUME THE OPPOSITE.

Signs—Hog—Hottentot—Napoleon I.—Distinguished from Voluntativeness, ... 162

POLYEROTICITY, THE DISPOSITION TO LOVE MANY.

Signs—Belongs to a Low Nature, ... 163

MNEMONICONOMINALITY, THE POWER OF REMEMBERING NAMES.

Signs, ... 164

CHROMATICALNESS, THE ABILITY TO JUDGE COLOURS.

Signs—Colour-blind People—Reason, ... 164, 165

DEMOLITIOUSNESS, THE PROPENSITY TO DESTROY.

Signs—Strength Necessary—Carnivorous Animals—Broad Make, 166, 167

PHILONEPIONALITY, LOVE OF THE YOUNG.

Signs — Produced by Frequent Exercise — Abundance of the Vital Fluids, ... 168

LINGUISTIVENESS, OR POWER OF SPEECH.

Signs—Dependent on the Size, &c., of the Organs, . . 169, 170

PHYSIODELECTATIOUSNESS, DELIGHT IN PLEASURES OF SENSE.

Signs—How Produced, ... 171

CURATIVENESS, THE ABILITY TO MINISTER HEALTH.

Signs—A Transference of Vital Energy, ... 172

SOLICITIREPUTATIVENESS, OR LOVE OF PRAISE.

Signs—Sensitive to External Influences, ... 173

INEXORABLENESS, OR UNRELENTING DISPOSITION.

Signs—How Developed, ... 173

CONSECUTIVENESS, THE CAPABILITY OF CLOSE AND CONNECTED THINKING.

Appears in Permanent Wrinkles, where, ... 174, 175

SONIDIFFUSITIVENESS, THE FACULTY OF VOCAL MUSIC.

Signs—Chiefly in the Mouth, ... 176

DECORATIVENESS, THE DISPOSITION TO ORNAMENT.

Signs—In the Eyes and Eyebrows, ... 177, 178

HUNTATIVENESS, THE DISPOSITION TO PURSUE.

Signs—In the Eye, Forehead, and Carriage of the Head, . . 179

SAGACITIVENESS, OR SHREWDNESS.

Signs—In the Neck—Napoleon I., ... 180, 181

TRADATIVENESS, OR THE DISPOSITION TO BARTER.

Signs—In the Jaw and General Configuration, ... 182, 183

ADAPTATIVENESS, OR THE FACULTY OF PERCEIVING FITNESS.

Signs—In the Chin, ... 184

CLASS IV.—THE COGNIZANT CAPACITIES.

BONY FORM PREDOMINANT.

DISCRIMINATIVENESS, OR THE JUDGING FACULTY.

Signs—In the Eye and Nose-Tip, ... 185

STRUCTURODEXTERITY, THE MECHANICAL ABILITY.

Shewn in Squareness of Face—Complexion Suited for Iron-Working, 186

ORDINIPHYSICALITY, THE DESIRE TO ARRANGE.

General Signs, ... 187

ANGULARITIVENESS, THE ABILITY OF APPRECIATING ANGLES AND STRAIGHT LINES.

Signs, ... 188

BENEFICENTNESS, THE INCLINATION TO DO GOOD.

Signs—In the Forehead, Nose, and Length of Face, ... 189

DECISIVENESS.

Signs—In the Features, ... 190

OBSERVATIVENESS, THE DISPOSITION TO OBSERVE CLOSELY.

Signs—In the Eyebrows—Darwin, ... 191

PERSISTENACITY, THE DISPOSITION TO HOLD ON.

Chief Sign—In the Jaw, ... 192-194

RECTITUDITIVENESS, OR HONESTY OF PURPOSE.

Signs—In the Squareness of Structure, ... 195

COMPUTATIONUMERICALITY, OR SKILL IN COUNTING.

Signs—In the Eyebrows—How Produced, ... 196

SOLIDATIVENESS, THE POWER OF JUDGING SOLIDITY.

Signs—In the Gait and Eyes, ... 197

SUGGESTIVENESS, THE DISPOSITION TO HELP BY COUNSEL.

Signs—Chiefly in the Nose—Squat-Build—Selfish, ... 197

CHARACTERIOSCOPICITY, THE POWER OF DISCERNING CHARACTER.

Signs—In the Frontal Bone and Nose—Why, ... 198, 199

AMICITIVENESS, THE INCLINATION TO FRIENDSHIP.

Signs—In the Forehead and Eyes, ... 200

ORIGINATIVENESS, THE POWER OF PRODUCING SOMETHING NEW.

Shewn in Coarse Features—Why, ... 201, 202

MENSURATIVENESS, THE FACULTY OF MEASURING.

Signs—In the Lower Forehead and Eyebrows, ... 203

PERTINACIOUSNESS, THE OBSTINATE DISPOSITION.

Shewn in the Jaw, ... 204

TEMPORIMECHANICALITY, OR MECHANICAL TIME.

Combination of Two Faculties and their Signs—Duke of Wellington, 205

PRACTICALITIVENESS, THE DISPOSITION TO TURN EVERYTHING TO A USEFUL PURPOSE.

Shewn in the Forehead, ... 206

REVERENTIALNESS, DISPOSITION TO REVERE AND SUBMIT.

Signs—Submissive and Unsubmissive Animals, ... 207, 208

CLASS V.—THE ELEVATIVE ENDOWMENTS.

BRAIN AND NERVE FORM PREDOMINANT.

ORDINIMENTALITY, THE DISPOSITION TO SYSTEMATIZE.

Signs – In Harmonious Structure, ... 209

PRESCIENCE, THE FACULTY OF ANTICIPATING.

Evinced in the Dreamy Eye and Forward Bend, ... 210

SUSCEPTIBLENESS, OR THE QUALITY OF BEING INFLUENCED.

Signs, ... 211

MENTIMITATIVENESS, THE DISPOSITION TO IMITATE THE INTELLECTUAL EFFORTS OF OTHERS.

Chief Sign—In the Forehead, ... 212

AFFABLENESS, OR DESIRE TO PLEASE.

Evinced chiefly by the Length of Neck, ... 213

SALITIVENESS, OR READY WIT AND FUN.

Shewn in a Pear-Shaped Face, ... 214

SUBLIMITASITY, APPRECIATION OF THE SUBLIME.

Evinced by the Shape of Face and General Organization, . . 215

FUTURITIVENESS, THE DESIRE OF A FUTURE LIFE.

General Appearance – How Produced, ... 216

ÆSTHETICALNESS, APPRECIATION OF THE BEAUTIFUL.

Sign—In the Nose—Reason, ... 217

CAREFULNESS.

Sign—In the Nose—Elephant, ... 218

SPEMENTALITY, OR SPIRITUAL HOPE.

Faculty Explained—How Developed in the Body, . . . 219, 220

PURITATIVENESS, OR CHASTITY.

General Signs, ... 221

INTUITIVENESS, THE FACULTY OF ARRIVING AT TRUTH WITHOUT REASONING.

Signs – In the Forehead and Eyes, ... 222

LITERATIVENESS, OR SKILL IN PRODUCING WRITTEN LANGUAGE.

Full Forehead and Pyriform Face, ... 223

CLEANNESS.

Evinced in the Hare, Rabbit, Hog, ... 224

PITIFULNESS.

Signs in the Eye, and Position of the Head, ... 225

IMAGINATIVENESS, OR THE POWER OF FANCY.

Whence Arising—How Evinced, ... 226, 227

FACTIMEMORIATIVENESS.

Memory of Facts—How Shewn in the Forehead—Remarkable Examples of Memory—What Impairs Memory—Instances—Directions for Improving it—Danger of Over-taxing, ... 228, 234

PRUDENTIALITY, OR PRACTICAL WISDOM.

How Evinced in the Eyes—Signs of Imprudence in the Nose and Mouth, ... 234

CREDULOUSNESS.

Disposition to Believe—The Sensational Department analogous to this Faculty, ... 235

COURTEOUSNESS.

Medium Construction Necessary to this Faculty, ... 236

ATTENTIVENESS.

Evinced in the Position of the Head, ... 237

SYMPATHETICALNESS.

Numerous Signs--Qualities Necessary for this Faculty, . . 238, 239

CLASS VI.—THE PERFECTIVE QUALITIES.

(REQUIRING A COMBINATION OF TWO OR MORE OF THE FIVE FORMS.)

GRACEFULNESS.

Developed in a Slim and Pliable Structure—Inconsistent with the Predominance of Bone or Nerve, ... 240, 241

PROSPERATIVENESS, THE POWER OF ACHIEVING SUCCESS.

Shewn in Certain Curves about the Mouth, ... 242

PHYSIOHARMONITIVENESS, THE POWER WHICH APPRECIATES HARMONY IN THE HUMAN BODY.

The Indication in the Man Himself exhibiting a Harmonious Combination of Material, ... 243

PROPORTIONATIVENESS, THE FACULTY THAT RECOGNIZES SYMMETRY.

General Conditions, ... 244, 245

DEDUCTIVENESS, THE FACULTY OF DRAWING CONCLUSIONS.

Signs—Incompatible with a Low Flat Nose—Requires a Well-balanced Structure, ... 246, 247

VARIOUS RACES OF MEN.

European—American—Many Races—Early Giants—Physical Causes of Diminished Stature and Improved Mind, ... 248–261

COLOURS OF RACES.

Unchangeable Colour found with Incapability of Improvement—Darkness and Barbarism Synonymous—The Darkest Races the Oldest, 262–269

THE GENERATIVE CAPACITY.

No Spontaneous Generation—Signs of this Capacity, ... 270–275

THE REARING OF YOUTH.

Clothing—Food—Lessons: Obedience, Love, Observation, Politeness, Gentleness, Patience, Commingling of Sexes, Trade, Perseverance, Vices, ... 276–294

CONNECTION BETWEEN VARIOUS PARTS OF THE HUMAN BODY.

Lower Animals—Signs of Quick Temper and Slow Revenge—Of good Digestion—Of weak Kidneys—Of base or Platonic Love—Significance of Eyes, ... 295–301

INFLUENCE OF FOOD ON CHARACTER.

The Milk Sucked in Infancy—Food of English, French, and Scotch producing Distinctive Character, ... 302–309

THE LAWS THAT CONTROL THE LINES OF THE HUMAN FACE.

Smooth and Rough Faces—Lines Incident to each of the Five Structures, as Abdominal, &c., ... 310–315

EFFECT OF ALTITUDE.

The Atmosphere—Physical Man most Perfect in Western Asia—Degeneration as He Recedes from this Centre—Structure of Continents—How Influencing Civilization—Local Causes Affecting Mind—Swamps and Low Lands—Hilly Regions Favourable, ... 316–333

CHARACTERIZED FROM BIRTH.

Responsibility—Hereditary Good and Evil never wholly Eradicated—Children, unlike their Parents, are the least Susceptible of Culture—Examples of Inherited Talent—And Physical Conformation, . 334–338

CHANGE OF THE HUMAN FACE.

Variety of Face—Changing with the Ages of the World—And the Individual—Eminent Men most Distinguishable, ... 339–344

COMMON SENSE.

Definition—Idiots and Lunatics—Enthusiasts and Preachers, . 345–350

THE THINKER.

How Recognized by the Physiognomist—Examples: Lincoln, Webster, 351–356

CURLY LINES.

Roundness of Vegetable and Animal Lines—Influence of Large Towns—Dispositions of Curly-Lined Animals—Children and Negroes—Students—Mechanics—British Statesmen—And American, . . . 357–363

THE WALK AS INDICATIVE OF CHARACTER.

Principles—Tall and Short Men—Different Kinds of Step. WALK OR GAIT—The Natural: Toddling, Striding, Lurching, Sweeping, Firm, Shuffling, In-toed, Splay-footed, Plunging, Fatuous—Artificial: Military, Clerical, Legal, Medical, Mechanical, Tradesman, ... 364–387

SALUTATION.

Modes of Different Nations—Hand shaking—Varieties, . . . 388-395

THE EXPRESSION OF LAUGHTER.

Only Human—Not necessarily Vulgar—Varieties, ... 396–399

HAIR.

Described—Various Colours Indicative of Temper—Texture—Quantity—Baldness, ... 400–408

DIMPLES.

Cause of—Not Found in the Large Boned—Character of Dimpled People, ... 409–413

MISERLY MARKS.

Origin of the Word *Miser*—General Configuration—Niggards sometimes Reputed Liberal—Examples—Wrinkles, ... 414-423

HARMONY OF THE HUMAN FACE.

Parental Influences—Unbalanced Minds, how indicated—Examples—How to Cultivate Harmony—Music, ... 424–433

MASCULINE AND FEMININE FACES.

Sex of Soul—Masculine Women—Uterine Influences—Attraction of Masculine for Feminine Natures, ... 434–439

SIGNS OF PHYSICAL STRENGTH.

Hardness in Minerals and Trees—Broad and Massive Structure in Animals—And Men, ... 440–445

PHYSICAL LABOUR.

Arabia the Anti-industrial Centre—Industrious Nations—Signs of Industrious Disposition—Modern Aversion to Labour—Physical Training among the Ancients—Modern Physical Education, . . 446–455

THE EFFECTS OF INDUSTRY ON THE HUMAN FACE.

Smooth Faces—Boy and Man—Rogue's Photographs, . . 456–460

PHYSIOGNOMICAL SIGNS OF PHYSICAL ENDURANCE.

Hardness—Bony Structures—The Camel and Ass—Lincoln, Weston, Jackson, Wellington, ... 461-464

MARKS OF LONGEVITY.

British Association—Signs of Longevity, and Causes—Long-lived Animals and Men—Term of Seventy Years, ... 465–473

ONE-SIDED PEOPLE.

Few Persons Perfectly Formed—Causes—One-sided Theology and Politics—Mammon-Worship, ... 474–481

PROGRESS IN ANIMAL AND VEGETABLE LIFE.

Animals which Vary in Colour are Capable of Improvement – So Vegetables —The Apple—The Dog, Horse, Ox, ... 482–484

ACTIVITY.

Plan for Speed is Length—For Strength is Breadth—Examples of Men—Animals, ... 485–489

RELATIVE PROPORTIONS OF WIDTH TO HEIGHT IN MANKIND.

Principles of Proportion in Animals and Trees — Windship and Weston, ... 490–494

PENETRATION OF MIND.

Definition of Penetrate—Part of Speech—Perception of Character—Sharpness of Features denote Astuteness of Intellect—Crow—Greyhound—Sharp Noses, Eye-bones, Chins, ... 495–496

PATHOGNOMONIC SIGNS.

Ravages of Disease—Its Causes and Reasons—Signs of Consumption, Dyspepsia, Scrofula, Liver Disease, Chronic Rheumatism, Kidney Disease, Love Sickness—Anecdote—Private Diseases—Medical Practitioners, ... 497–504

FASHION; OR MAN DEFORMED BY ARTIFICIAL MEANS.

Beautiful Human Forms—Various Disfigurements, their motives—Heads how Disfigured—Noses—Ear-rings and Nose-rings—Mouths—Teeth—Tongues—Hands and Feet—Nails—Tight-lacing—Long Feet—Pointed Shoes—Stocks and Collars—Hair—Tattooing—Widow's Disfigurement—Face-patching—Freckles and Pimples—Tobacco and Alcohol—Tea and Coffee-drinking, ... 505–536

SIGNS OF INTELLIGENCE IN MEN AND ANIMALS.

Rules for Discerning Intelligence—The Pointer and the Bear—The Hog, Opossum, Rhinoceros, compared with the Ox—Human Intelligence how Evinced, ... 537–539

ORIGINALITY OF MIND.

Only a Few Predominent Men—Shakespeare—Napoleon—Outward Marks—Examples—Children not Originators, but Imitators—Monkeys and Sheep—Politics and Religion produce few Originators, many Followers, why?—Despotic Governments, ... 540–545

MENTAL LABOUR.

Savages Averse to all Labour—Machinery *versus* Hand Labour—Mental Labour Exhausting—Slow Development of some Minds—A European House and a Pyramid contrasted—Mental Industry in Races—Signs of it, ... 546–550

THE LOVE OF MENTAL PLEASURES.

Every Faculty has its Object and Enjoyment in it—Mental Faculties may be Used to Excess—In Moderation, Intellectual Pleasures are Superior, Lasting, and Cheap—Physical Signs, ... 551–553

FORCE OF CHARACTER.

Some Born to Govern—Signs of Leading Men—Men Distinguished for Vigorous Writing, ... 554–556

DECISION OF CHARACTER.

Importance of Character—Reading to Employers—Wavering Characters—Rousseau and Hume—Scotch and English—Gladstone—Anecdote of Scotch Decision — Principles underlying Decision — Demosthenes—Cæsar—Napoleon I.—Franklin — Lincoln — Wellington — French and Germans—Physical Signs—Causes—Strong Bone—Influence of Food—Jackson—a Thief—Decision, not Dependent on Bulk—Mechanics seldom Thieves—Dr. Pritchard—Dr. Beecher—John Locke—Work, the Foundation of Noble Character, ... 557–567

HUMILITY.

Humility towards God, Wise—Towards Men, indicates Want of True Dignity—Few People Love to be Humble to All—Many Bow to some One Master—Sign in the Carriage of the Head—Moderate Humility gives Engaging Manners—Affectation of Humility, ... 568–571

THE ORIGIN OF PHYSICAL, MENTAL, AND SOUL LIFE.

Nature Teems with Life—First Men were Coarse and Dark—Whiter Races Produced when the Earth became Cooler—Still Superior may Yet Come Forth—First Men had Little Mind—Affliction Refines Mind—Butterfly—Human Species might be Improved by More Careful Breeding—Signs of a Large Soul—Future Life will be a Development of Mind and Soul, ... 572–577

PERFECTION OF CHARACTER.

Dependent on Parentage — Influence of Consanguinity on Offspring—Harmony rather than Beauty, Desirable—Importance of Suitable Mating—How to Ensure it—Fair-haired People should Marry Black-haired—a Large Mouth, a Small One, &c.—We cannot Destroy any Faculty, but Restrain or Cultivate—By Food, Study, Self-control, and Well-directed Love, ... 578–586

ÆSTHETICALNESS, OR LOVE OF THE BEAUTIFUL.

Symmetry and Proportion contrasted—Beauty in Sentiment and Love—Edmund Burke's Analysis of—Beauty in Form and Colour—Sign—Manner of Culture, ... 587–591

ATTENTIVENESS.

The Father of Sir Robert Peel—Culture of Sir Robert—Advantages of—Sign—Success somewhat Dependent upon Attention, . . 592–594

PROOFS OF A FUTURE LIFE FOUNDED ON NATURE.

Falsity of Ideas based on Fashion—All Life tends to Reproduction—Sight more likely to Deceive than Reason—Examples—Nothing in Nature is Annihilated—Change is the Law of Nature—The Desire of Future Life an Evidence that there will be One—Use of us here as Bricks in a Building—Will be similarly Wanted for a Future Life, . . 595–600

LIST OF ILLUSTRATIONS.

THE AUTHOR, ... *Frontispiece.*

Engraved by George A. Morison, Edinburgh.

PAGE

The Abdominal Form Large—The Claimant for the Tichborne Estate, ... 46
The Abdominal Form Small—Wallace of Kelly, . . . 46
The Thoracic Form Large—William III., ... 55
,, ,, Small, ... 56
The Muscular Form Large—S. Judas Thadeus, . . . 61
,, ,, Small—Princess Anne, . . . 62
The Osseous or Bony Form Large—Lowrie Coulter, . . 76
,, ,, ,, Small—G. W. M. Nutt, . . . 77
The Brain and Nerve Form Large—John Price, . . . 83
,, ,, ,, ,, —Dr. Spraker, . . . 84
,, ,, ,, Small—George III., . . . 84
,, ,, ,, Large—Rev. S. H. Tyng, . . 85
,, ,, ,, Small—Thomas Cribb, . . 86
Welsh Woman, ... 124
Mrs. Bachus, ... 124
A Fort Rupert Indian, ... 126
Horace Greeley, ... 126
George Morland, ... 127
Nicholas Copernicus, ... 127
Robert Gregson, ... 129
Nana Narian, ... 129
Samuel R. Ward, ... 130
David Duncan, a Hermit of Michigan, ... 130
David Hume, ... 131
Gustavus III., ... 131
Thomas Becon, ... 135
Thomas Molineaux, ... 135
Lavater, ... 137
Chinese Woman, ... 137
Owl, ... 140
Crow, ... 140
Beau Brummel, a noted Fop of England, ... 144
Immanuel Kant, ... 144
Bach, ... 146
An Indian of Callam Bay, ... 146
John Broughton, ... 148
Joseph Justus Scalliger, ... 148

PAGE
A Lion, ... 148
A Giraffe, ... 148
A Squirrel, ... 150
J. H. Newman, D.D., ... 152
Tamberlik, ... 152
The Unmusical Ear, ... 153
The Ear of Adeline Patti, ... 153
Mr. E. F. Simms, ... 155
Miss Stuart, ... 155
Miss Harriet C. Hosmer, ... 156
Jim, a Piute Indian, ... 156
Commodore Vanderbilt, ... 157
A Squanderer, ... 157
Mrs. Margaret Fuller Osoli, ... 158
Brigham Young, ... 158
A Chinese Woman, ... 159
George III., ... 159
Thomas C. Haliburton (Sam Slick), ... 161
Charles I., ... 161
Napoleon I., ... 162
The Eye of Mrs. Margaret F. Osoli, ... 163
The Eye of Brigham Young, ... 163
The Head of a Hog, ... 163
The Head of a Turtle-Dove (*Turtur Auritus*), . . . 163
William Ross, employed in Chambers's Publishing House in Edinburgh, ... 165
Antonio Allegri, or Corregio, ... 165
B. Gosse, Esq., ... 166
John R. Webster, ... 166
The Head of a Hare, ... 167
The Head of a Tiger, ... 167
A Loving Italian Mother, ... 168
John B. Gough, ... 170
Deaf and Dumb Girl of Illinois, ... 170
A Parrot, ... 170
Marchioness of Hertford, ... 171
Henry VIII., ... 171
An Irish woman of Edinburgh, ... 174
Mary F. Scott Siddons, ... 174
Cyrus W. Field, ... 175
A Selfish Cat, ... 175
An Irish Peasant, ... 176
Parepa Rosa, ... 176
A Duck, ... 177
A Canary, ... 177
A Digger, an Indian of California, ... 178
The Chetah, or Hunting Leopard, ... 179
Thomas Parr, ... 180

PAGE
A Chimpanzee, taken from life, in the Zoological Gardens of London, 181
An Ostrich, ... 181
An Asiatic Elephant, ... 181
Jacob Strawn, an extensive farmer and cattle dealer of Illinois, . 182
Mr. T. Glover, a Dry Goods merchant of Quebec, . . . 183
Thomas Cook and Wife (*Avarice*), ... 184
Linnæus, ... 185
A Chinese Woman, ... 185
James Watt, ... 186
P. T. Barnum, ... 186
Edwin Booth, ... 188
A Disorderly Flat-head Indian, ... 188
Edward V., ... 189
An Old Cardinal, ... 189
Peter Cooper, ... 190
An Australian Man, ... 190
Montesquieu, ... 191
Louis W. Jackson, ... 191
Charles Darwin, ... 192
Persistenacity very Large, ... 193
Johnny, Persistenacity very Small, ... 193
A Prairie Wolf, or Coyote, ... 193
A Bull-dog, ... 193
John Tetzel, the *dishonest* face, ... 194
Andrew Jackson, the *honest* face, ... 194
Lizzie Smith, a pickpocket, ... 195
William Tyndale, a martyr, ... 195
Lord George Lyttleton, who was unable to learn the common rules of Arithmetic, ... 196
Thos. Allen, the first Mathematician of his day, . . . 196
Mr. Holcraft, of California—Suggestiveness Large, . . 198
J. B. Porta, the Inventor of the Camera Obscura and Physiognomist, 199
Rev. J. G. Lavater, Poet and Physiognomist, . . . 199
Mrs. Lydia H. Sigourney, ... 200
Catharine II., ... 200
Prof. S. F. B. Morse, ... 201
Geo. IV., ... 202
J. Q. A. Ward, Sculptor, ... 203
Charles XII., of Sweden, ... 204
Ristori, Actress, ... 204
The Head of a Hunting Horse, ... 205
The Head of an Ass, ... 205
A Chinese Girl, ... 205
The Duke of Wellington, ... 205
Thomas D'Urfey, an impractical English Poet, . . . 206
C. M. Wieland, a practical Poet of Germany, . . . 206
Ambrose Pare, a distinguished French Surgeon, . . . 209
Ratasse, Prince of Madagascar, ... 209

PAGE
Charles James Fox, ... 211
John Elwes, a noted Miser of London, ... 211
Elizabeth Canning—Mentimitativeness Large, . . . 212
Mary Squires, the Gipsy, ... 212
Rulof, a murderer, ... 213
Mrs. Josephine A. Prosch, of New York, ... 213
Ute Indian, of Salt Lake, ... 215
Samuel L. Clemens (Mark Twain), Author of *Innocents Abroad*, . 215
Kettle, a Selfish Indian Chief, of Washington Territory, . . 217
Charlemagne—Æstheticalness Large, ... 217
Flavius Josephus—Carefulness Large, ... 219
Thomas Hudson, notoriously Unfortunate, . . . 219
James Fisk, jr., of Erie Railroad notoriety, . . . 220
John Milton—Spementality Large, ... 220
A Patagonian—Puritativeness Small, ... 221
Lucretia Mott, a Quakeress Preacher, ... 221
Simon Fraser Lovat—Intuitiveness Small, ... 222
Giuseppe Mazzini, a talented Italian Patriot, . . . 222
Mr. Thos. Rogerson—Literativeness Small, . . . 223
John Ruskin, a brilliant Author and Art Critic, . . . 223
The Duchess of Kent, the Mother of Her Majesty, Queen Victoria, 224
Nathaniel Bently, the dirtest Man in England, . . . 224
Nero—Pitifulness very Small, ... 226
Baroness Angela Georgina Burdett-Coutts, . . . 226
Lamartine—Imaginativeness Large, ... 227
A Babbler—Imaginativeness Small, ... 227
Frederick H. A. Baron von Humboldt, ... 228
Miss Catharine Dunn, whose weight is 425 Pounds, . . 228
A Saucy Boy, of Jacksonville, Illinois, ... 234
John Sherman, U.S., a Senator from Illinois, . . . 234
Voltaire—Credulousness Small, ... 235
Wm. Harvey, M.D., who discovered the Circulation of the Blood, 235
D. Fernando VII., a Tyrant, ... 237
Count D'Orsay—Courteousness Large, ... 237
Abbey Kelley Foster—Attentiveness Large, . . . 238
His Majesty Pomarre, King of Taheite, ... 238
Robespierre, a Bloody Tyrant, ... 239
Eustache—Sympatheticalness Large, ... 239
A Swan—Gracefulness Large, ... 240
A Male Hippopotamus, taken from life, in the Zoological Gardens in London, ... 241
Caius Julius Cæsar, the Dictator, ... 242
A Kyast Banian Man, of Surat, in India, ... 242
Cut Nose, an Indian, ... 243
G. F. Handel—Physioharmonitiveness Large, . . . 243
Sarah and John Rovin, aged 164 and 172 respectively, . . 244
Petrarch Zortan, 185 years of age, ... 245
A Flat Head Indian, ... 245

PAGE
A Quatsino Indian, ... 245
Dr. John Hunter, ... 245
Foolish Sam—Deductiveness Small, ... 246
John Locke—Deductiveness Large, ... 246
King William, of Prussia, ... 248
A Flat-head Indian, Front and Profile, ... 249
A Quatsino, of the N. W. Coast of Vancouver Island, . . 250
A murderous Indian of Minnesota, ... 250
A Digger Indian, of California (full length), . . . 251
Orison J. Stone, of Boston, ... 282
Negro Boy, ... 282
John Wyckliffe, ... 290
John Broughton, a bloodthirsty Pugilist, ... 291
Love and Obedience, ... 292
Hate and Disobedience, ... 292
David Hume, ... 296
Gustavus III., ... 296
Vitellius, a good Digestion, ... 297
Charles VI., Emperor of West Austria, ... 298
Aulus Vitellius, Emperor of Rome, ... 311
Foolish Sam, ... 348
Major, a Lunatic of Glasgow, ... 349
Curly Face, ... 359
Straight Face, ... 359
Systematic and Straightforward Gentleman, . . . 360
Surly and Deceptive Scamp, ... 360
A Curly, Ambitious, and Jealous Dog, ... 363
Foolish Mary, ... 368
Bob Dreghorn—The Striding Gait, ... 370
Blind Alick—The Sweeping Gait, ... 374
Captain Paton, of Glasgow, ... 380
David Dale, a Good Man, ... 384
Filament of Wool, ... 403
Negro Hair, ... 403
Love, Faith, Intuition, and Innocence, ... 409
Miss Margaret Clephne, ... 417
John Elwes, ... 419
Daniel Dancer, a Miser and Hermit, ... 420
David Duncan, Hermit of Michigan, ... 426
Washington Irving, ... 426
Rev. John Summerfield, ... 435
Miss Rosa Bonheur, ... 436
Egbert, King of the West Saxons, ... 439
Diogenes, a Cynic Philosopher, ... 457
Lucius Annæus Seneca, a celebrated Roman Philosopher, . . 458
A Scotchman, of Edinburgh, ... 459
Greyfriar's Bobby, ... 481
A Macrone, ... 507

PAGE
A Quatsino, Indian Girl, ... 508
A Cumana Woman, ... 508
A Welsh Woman, ... 509
An Egyptian Man, ... 509
A Muscovite Man, ... 510
A Flat-head Indian, ... 510
A West India Man, ... 510
A Greek Man, ... 510
A Scythian Man, ... 511
A Belini Man, ... 512
A Woman of Zanzibar, ... 513
A Woman of Scatia, ... 513
A Peruvian Man, ... 513
A Persian Man, ... 513
A Kyast Banian Woman, of Surat, in Western India, . . 514
A Flat-head Indian, ... 514
A Cornori Woman, ... 515
A Cochi Woman, ... 515
A Woman of Turkey, ... 516
An Ethiopian, ... 516
A Parie Man, ... 517
A Macus Man, ... 517
A Tanibalian, ... 517
A Portuguese Woman, ... 518
A Chinese Man, ... 518
Miss Tight-laced, ... 519
Natural Waist, ... 519
A Chinese Woman, ... 521
A Sciopede Man, ... 521
A China Man, ... 523
Captain Staddon, of San Francisco, ... 524
Rev. Henry Ward Beecher, ... 525
Fashionable Head-dress of U. S. A. in 1860, . . . 528
A Digger Indian, attired for an annual War Dance, . . 529
An Indian of Arizona, ... 530
A Samian Man, ... 530
A Digger Indian, of California, ... 531
Hon. Daniel Webster, ... 532
An Irish Peasant, ... 533

THE NAME, PRONUNCIATION, SYLLABICATION, AND ACCENTUATION OF EACH FACULTY.

The pronunciation is given immediately after each word in the following list, by the word being spelt anew phonetically. The number of the page where the literal meaning of the word may be found is given opposite each word respectively.

	PAGE
Acquiesciveness, ăk'-kwī-ĕs"-sĭv-nĕs	123
Animalimitationality, ăn'-ĭ-măl-ĭmĭ-tā'-shŭn-ăl'-ĭ-ty	126
Aquasorbitiveness, ăk'-kwă-sŏr'-bĭt-ĭv-nĕs	127
Physioëlpidicity, fĭz'-ĭ-ō-ĕl'-pĭ-dĭs"-ĭ-ty	128
Graspativeness, gras'-păt-ĭv-nĕs	129
Associativeness, as-sō-see-ā'-tĭv-nĕs	130
Appetitiveness, ăp'-pĕ-tī'-tĭv-nĕs	131
Retaliativeness, rĕ-tăl-ĭ-ā'-tĭv-nĕs	132
Sentinelitiveness, sĕn'-tĭ-nel"-ĭ-tĭv-nĕs	134
Morivalorosity, mō'rĭ-văl-ō-rŏs"-ĭ-ty	135
Elevativeness, ĕl ĕ-vā'-tĭv-nĕs	136
Olfactiveness, ŏl-fak'-tĭv-nĕs	137
Resistativeness, rē-zĭs'-tā-tĭv-nĕs	138
Assaultativeness, ăs-sâult'-tă-tĭv-nĕs	139
Watchfulness, wâtch'fûl-nĕs	139
Suspiciousness, sŭs-pĭsh'-ŭs-nĕs	140
Locomotivity, lō'-kō-mō-tĭv'-ĭ-ty	141
Inquisitiveness, ĭn-kwĭz'-ĭt-ĭv-nĕs	142
Ambitiousness, ăm-bĭsh'-ŭs-nĕs	142
Autohegemony, âw'-tō-hē-gĕm"-ō-ny	143
Temporinaturalitiveness, tem'-pō-rī-nat'-ū-răl'-ĭ-tĭv-nĕs	146
Physiovalorosity, fĭz'-ĭ-ō-val'-ō-rŏs"-ĭ-ty	147
Sophisticalness, sō-fĭs'-tĭ-kăl-nĕs	149
Playfulness, plā'-fûl-nĕs	150
Intermutativeness, ĭn-tĕr-mū'-tā-tĭv-nĕs	151
Philomonotopicalness, fī'-lō-mon'-o-top-ĭ-kăl-nĕs	151
Tonireceptionality, tŏn'-ĭ-rē-sĕp'-shŭn-al'-ĭ-ty	152
Concealativeness, kŏn-see'-lă-tĭv-nĕs	154
Economosity, ē-kon'-ō-mos"-sĭty	155
Curativeness, kū'ră-tĭv-nĕs	155
Accumulativeness, ăk'-kū-mū-lā"-tĭv-nes	157
Monoeroticity, mŏn'-ō-ĕr'-ō-tis"-ĭ-ty	158
Voluntativeness, vō'-lŭn-tā"-tĭv-nĕs	159
Merriness, mĕr'-ĭ nĕs	160
Providentness, prŏv'-ĭ-dĕnt-nĕs	161
Contrativeness, kŏn'-tră-tĭv-nĕs	162
Polyeroticity, pol'-ĭ-ĕr-ō-tĭs"-ĭ-ty	163
Mnemoniconominality, nē-mŏn'-ĭ-kŏn-ŏm-ĭ-năl"-ĭ-ty	164
Chromaticalness, krō-mat'-ĭ-kăl-nĕs	164
Demolitiousness, dē-mō-lĭsh'-ŭs-nĕs	166
Philonepionality, fī'-lō-nē'-pē-o-nal"-ĭ-ty	168
Linguistiveness, lĭng-gwĭst'-ĭv-nés	169
Physiodelectatiousness, fĭz'-ĭ-ō-dē-lĕk-tā"-shŭs-nĕs	171
Curativeness, kū'-ră-tĭv-nĕs	172
Solicitireputativeness, sō-lis'-ĭ-tī-rĕp-ū-tā"-tĭv-nĕs	173
Inexorableness, ĭn-ĕgz'-ō-răb-ĕl-nĕs	173
Consecutiveness kŏn-sĕk'-ū tĭv-nĕs	174
Sonidiffusitiveness, sō-nī-dĭf-fū'-sĭ-tĭv-nĕs	176
Decorativeness, dĕk-ō-ra'-tĭv-nĕs	177

PAGE
Huntativeness, hŭnt′-ă-tĭv-nĕs .. 179
Sagacitiveness, să-găs-ĭ-tĭv-nĕs .. 180
Tradativeness, trād′-ă-tĭv-nĕs .. 182
Adaptativeness, ă-dăp′-tă-tĭv-nĕs .. 183
Discriminativeness, dĭs′krĭm-ĭ-nā″-tĭv-nĕs .. 185
Structurodexterity, struk′-tū-rō-dĕx-tĕr″-ĭ-ty .. 186
Ordiniphysicality, ŏr′-din-ĭ-fĭz-ĭ-kăl″-ĭ-ty .. 187
Angularitiveness, ăng-gū-lar′-ĭ-tĭv-nĕs .. 188
Beneficentness, bē-nĕf′-ĭ-sĕnt-nĕs .. 189
Decisiveness, dē-sī′-sĭv-nĕs .. 190
Observativeness, ŏb-zĕr′-vă-tĭv-nĕs .. 191
Persistenacity, pĕr-zĭs-tĕn-ă′-sĭ-ty .. 192
Rectituditiveness, rĕk-tĭ-tū′-dĭ-tĭv-nĕs .. 194
Computationumericality, kŏm-pū-tā′-shō-nū-mĕr-ĭ-kăl-ĭ-ty .. 196
Solidativeness, sŏl-ĭ-dā′-tĭv-nĕs .. 197
Suggestiveness, sŭj-jĕs′-tĭv-nĕs .. 197
Characterioscopicity, kăr-ăk-tĕr′-ĭ-ō-skō-piss″-ĭ-ty .. 198
Amicitiveness, ăm-ĭ-sī′-tĭv-nĕs .. 200
Originativeness, ō-rĭj-ĭn-ā′-tĭv-nĕs .. 201
Mensurativeness, mĕn-sū-rā′-tĭv-nĕs .. 203
Pertinaciousness, pĕr-tĭ-nā′-shŭs-nĕs .. 204
Temporimechanicality, tem′-po-ri-mĕ-kăn-ĭ-kăl′-ĭ-ty .. 205
Practicalitiveness, prăk-tĭ-kal′-ĭ-tĭv-nĕs .. 206
Reverentialness, rev′-ĕr-ĕn″-shăl-nĕs .. 207
Ordinimentality, ŏr′-dĭn-ĭ-men-tăl″-ĭ-ty .. 209
Prescience, prē′-shĕns .. 210
Susceptibleness, sŭs-sĕp′-tĭble-nĕs .. 211
Mentimitativeness, ment-ĭm-ĭ-tā-tĭv-nĕs .. 212
Affableness, ăf′-ăble-nĕs .. 213
Salitiveness, săl′-ĭ-tĭv-nĕs .. 214
Sublimitasity, sŭb lĭm-ĭ-tas′-ĭ-ty .. 215
Futuritiveness, fū-tūre′-ĭ-tĭv-nĕs .. 216
Æstheticalness, āce-thet′-ĭ-kăl-nĕs .. 217
Carefulness, kair′-fûl-nĕs .. 218
Spementality, spē-mĕn-tăl′-ĭ-ty .. 219
Puritativeness, pū-rĭ-tā′-tĭv-nĕs .. 221
Intuitiveness, ĭn-tū′-ĭt-ĭv-nĕs .. 222
Literativeness, lĭt′-tĕr-ă-tĭv-nĕs .. 223
Cleanness, kleen′-nĕs .. 224
Pitifulness, pĭt′-ĭ-fûl-nĕs .. 225
Imaginativeness, ĭm-măj′-ĭn-ă-tĭv-nĕs .. 226
Factimemoriativeness, făk′-tĭ-mĕm-ō″-rĭ-ă-tĭv-nĕs .. 228
Prudentiality, prû dĕn-shē-ăl′-lĭ-ty .. 232
Credulousness, krĕd′-ū-lŭs-nĕs .. 234
Courteousness, kōrt′-yŭs-nĕs .. 236
Attentiveness, ăt-tĕn′-tĭv-nĕs .. 237
Sympatheticalness, sĭm-pă-thĕt′-ĭ-kăl-nĕs .. 238
Gracefulness, graiss′-fûl-nĕs .. 240
Prosperativeness, prŏs-spĕr′-ă-tĭv-nĕs .. 242
Physioharmonitiveness, fĭz-ĭ-ō-hăr-mŏn′-ĭ-tĭv-nĕs .. 243
Proportionativeness, prō-pōr′-shŭn-āte-ĭv-nĕs .. 244
Deductiveness, dē-dŭk′-tĭv-nĕs .. 246

Nᴏᴛᴇ.—Pronounce ā as a in fāte; ă as in făt; â as in fâther.
„ ē as e in mē; ĕ as in mĕt.
„ ī as i in fīne; ĭ as in fĭn.
„ ō as o in nō; ŏ as in nŏt.
„ ū as u in pūre; ŭ as in bŭt; û as u in rûle.

INTRODUCTION.

For the science upon which we propose to treat, a science so comprehensive in its grasp, and embracing, as it does, those mysterious principles of nature itself, which are so apparent in their manifestations, and yet, in the eternal conditions of their origin, so impervious hitherto to the most indefatigable and unwearied researches of master minds, we have no more fitting a term than that of "Physiognomy;" a designation all too inadequate in the poverty and contractedness of its literal significance, to draw together, and fully to shadow forth in one word, the infinity of meaning which has its abode within the range of the subject. Adopted at an epoch when little more than the merest outline of facial peculiarity was wanted to be expressed, when comparatively little importance was attached to these peculiarities, and when, it need scarcely be said, the subsequent importance to which this department of Nature's mystic operations was destined to attain, was never so much as thought or dreamed of, the term "Physiognomy" performed its indicative functions passably well. As, however, through the slow course of centuries, the importance of the science became better appreciated, and its ultimate comprehensiveness began to be faintly shadowed forth, the poverty of the term fell further and further short of the widened signification which it was called upon to do duty for; and but for this slow and almost imperceptible ripening into maturity to which we have alluded, the term would have been left far astern and become disused, as all too insufficient for its purpose. Had the science, for instance, through some intellect far in advance of its times during the middle ages, advanced with giant strides into broad day, and made as much progress in ten years as hardly ten long centuries have sufficed to achieve, then would the term "Physiognomy" have been doomed; but, until very recently, no such sudden advance has been made, and the word has been retained with a gradually increasing significance to keep pace with the duties which it has to perform, until now it may be said truly the widening of its meaning has been co-eval and co-extensive with the evolution of the science itself. That science has now attained to such vast proportions in its intimate connection with everything human, and has become so universally recognized and established, that it can well afford to disregard any little shortcoming on the part of a word, which has to perform no more vital function than that of its signboard. We are content, therefore, to leave it in undisturbed possession of the place of honour to which it has been elevated in virtue of length of servitude; and this much may at all events be said in its praise, that it is readily understood by the meanest capacity, and offers no bar of high sounding nomenclature, to the neophyte who is preparing to tread the paths of initiation into the absorbing interest which its pursuit unfolds, and to participate in the incalculable benefits which the science never fails to shower upon its conscientious and painstaking votaries.

Physiognomy, as a science, has now taken up so assured a position in the foreground of social and scientific progress, and has become so thoroughly recognized in the important bearing which it takes up in relation to all phases of society, alike the most elevated and the most homely, that it has no need to fall back upon its pedigree for any adventitious aids to its advancement and prosperity; but however little it may require any bolstering up of this kind, it cannot fail to be deeply interesting to the student, to take a retrospective glance at its earliest conditions and surroundings. That it has, in all time, in a greater or less degree, been active in its operation and universal in its application, long before the crude and unformed intellect of the early progenitors of mankind—whatever they may have been—was capable of making even the faintest attempt to formulate its properties, is a proposition we think that cannot be doubted for a moment. That the universality and eternity of its scope must always have been, needs little reflection to convince any thinking man; and for ages before the dawn of history Physiognomy must have wielded, we may be sure, a power, mighty in its proportions, although little heeded it may be, by the beings on which it exerted its force. Nor do we require to predicate for such a state of things the existence of so highly organized beings as we are ourselves. A much lower type of organization would not preclude the living action of the all-pervading department of nature's functions of which we are treating, and wherever organisms existed, so far advanced as to be endowed with powers of vision, there must Physiognomy have been actively and perceptibly at work in the relations which subsisted between the different varieties of organisms. There would we find the destructive form at work in destroying and devouring other forms of a less aggressive character, and the whole operation of nature, going slowly but surely on in its onward march to a perfection, the advanced stages of which, if not its acme, we can now contemplate in the conditions with which we are surrounded. Be it understood, however, that in alluding to the advent of visual organs, we do not mean to mark or limit the commencement of the operations of Physiognomy, except in so far as they then became visible to, and noticeable by, the organisms themselves. Long anterior to this, nature must have been elaborating and perfecting this law of hers, which, through the lapse of ages, has attained such stupendous magnitude; but the mind of man reels back, stunned and dizzied, from the hopeless attempt to peer back to the remote recesses of the laboratory of that mysterious agency, which, for want of a better term, and it may be, in our ignorance, we call Nature. While, therefore, in the nature of things we are excluded from all actual knowledge of the development of Physiognomy during primeval and prehistoric times; and while we recognize how fruitless and unsatisfactory mere speculation invariably proves to be, when affecting a subject of such importance as is our present one, we may at all events indulge in a legitimate, not to say laudable, curiosity and interest, respecting the dawning and primary conditions of the science, if indeed we may dignify by such a term, a thing that was only, as yet, recognized half unwittingly and unconsciously. In glancing briefly at the early aspect and dawning conditions of the science, be it well understood, that we are in no wise to be considered as endorsing all or any of the opinions of the various writers whose names we may have to mention. In no department of abstract thought, perhaps, has opinion so much differed, or has error and misplaced deduction been so long entertained as recognized truth as in this science of which we are now treating; and it has been left to very recent times—to our own day, in fact, and that within the past very few years—so to elaborate the science, as to place it on a basis of the very firmest foundation; this basis being, an epitomizing of all previous experience, an avoidance of all previous error, and an experimentalizing on the very broadest principles, the whole forming, along with the conclusive and illustrative results with which it is flanked, a broad scientific formulary, too elaborate and complete in its details, to afford a vulnerable point of attack to the deadliest of its enemies. A resumé, therefore, of the early conditions of the science is in no way indispensable to the purpose of the present work, but is thrown in solely in the interest of the curious student of Physiognomy, who may possibly derive from it a pardonable satisfaction and amusement, akin to the sympathetic interest which the modern soldier of an antiquarian turn of mind feels in the contemplation of the rude flint battle-axes and arrow-heads used in the remote warfare of prehistoric times. That in the very earliest ages, and before the advent of written history, or at all events before the advent of any history which has weathered the stormy period of the middle ages, so fruitful in literary shipwreck, as we very well know, the principles of Physiognomy were entertained, recognized, and admitted, is a proposition that admits of very conclusive proof, even were there any now disposed to deny the assertion. Without trenching upon the resources of the Hebraic Philosophy, which was of a more emotional and less practical character than that of the Greek Philosophers, we have only to refer to the golden productions of the latter, which have been miraculously preserved to us, after surviving the crash of nations which accompanied, and the Cimmerian darkness which followed, the collapse of the Roman Empire, to find ample proof that Physiognomy was, even at the time of the very earliest of the Greek writers, a recognized department of science, however far it may have fallen short at that time of correctness or accuracy in its deductions or formulæ. Even in those remote times, it must have been regarded as having already attained to a comparatively venerable age, for we do not find it alluded to as anything which had then just burst upon the perception of the Greeks in all the crude immaturity of a new and wholly untried and untested discovery. Crude, immature, and in a high degree unreliable and unsatisfactory, it must then have been, is an assertion that will hardly be called in question; but at the same time it seems equally undeniable that it had become, comparatively speaking, aged in its error; and while there is everything in the writings of the Greek Philosophers in favour of the hypothesis of old age, and absolutely nothing favouring the view of recent birth, their animadversions point rather to a dissatisfaction with its existing conditions, and the dawning of a vigorous effort on the part of Greek subtlety of intellect—not to discard it as useless and pernicious quackery—but to separate the gold from the dross, and to purify it from the abuses with which it had become incrusted.

Aristotle, Polemon, Theophrastus, Plato, and at a later period Galen of Pergamos, were Greek writers who, with perhaps a dim intuition of the vast interests which were yet to be evolved from the womb of the science, all wrote on the subject, and endeavoured to add their quota of suggestion and speculation to the mass of mingled truth and error which had already been piled around it. Zopyrus, another Greek of a more practical and adventurous turn of mind, seems actually to have formulated the science, and to have come to the front as a practical Physiognomist. He drew up from Physiognomy alone, it is said, an estimate of the character of Socrates, not by any means complimentary to that gentleman, but with apparently a considerable dash of truth in its composition, since it appears to have been candidly recognized by the party most concerned, to be in all essential details, truthful, accurate and precise. Some lesser Greek names might be quoted representing authors who have written on this all-important subject, but we may not suffer ourselves to be so diffuse as we might be in this introductory part of the work.

Several Roman authors, such as Cicero, Pliny, and others, contributed somewhat to the advancement of the science; but in the gloom and barbarism which followed the disruption of the overgrown and unwieldy Roman edifice, and in the almost total eclipse of fine arts and literature which that stupendous and ruinous collapse of nations, peoples, and society entailed, the infant science of Physiognomy was, in common with other kindred departments of advancement and culture, almost totally extinguished. For some centuries during the continuance of this gloomy period of darkness and barbarism, we hear absolutely nothing of its existence, and nothing but its inherent vitality could have sufficed to buoy it onward to more congenial generations. This inherent vitality it possesses, however, in such a degree, that nothing short of the extinction of the human race and the hurling back of mother earth to its original conditions could have sufficed entirely to crush out the germs of life with which it is endowed; and accordingly, no sooner do we find the mists of ignorance and superstition beginning to clear off and to admit anew the light of intelligence, than we again find Physiognomy slowly but surely taking its place as a science; with many a false step it may be, but continually correcting itself and again pushing forward in the direction of its goal. Early in the 14th century, so far had the science attracted attention in the dawning of modern civilization and intellect, that we find Petrus de Abbano, in the year 1335, making it the subject of lectures before the students of the University of Paris: and although the information, it must be confessed, is meagre, yet the bare fact itself is significant. Michael Scott, who flourished in the 15th century, devoted no inconsiderable portion of his time and space to the elucidation of the science, in so far as his lights on the subject enabled him. The latter half of the 15th, and the whole of the 16th centuries, comprised a period when Physiognomical speculation and research seem to have been carried on with a degree of diligence and perseverance never attained before that time. In the latter part of the 16th, and the first portion of the 17th centuries, J. Baptista Porta, an enterprising and energetic Italian of Padua, wrote and published on this subject, a vigorous and painstaking work, which was illustrated and beautified by numerous cuts of faces of men and animals. In the year 1548, Michael Angelo Blondies issued a work on Physiognomy, having for its aim the elucidation of its principles, and the fixing of its powers and limits. In the same year a French writer, Anselm Pierre Douxciel, produced at Langres his "Speculum Physionomica," in which he endeavoured to lay down fundamental principles of the science. In the year 1588, Georgio Rizzacasa, of Carmagnola, seems to have been occupying himself to some purpose with the subject, as we since learn that he was then dedicating a volume on "Fisionomia" to Queen Elizabeth; and in the following year we discover Johannes Padovanus of Verona affirming broadly, "that every conceivable variety of character was shadowed out, and might be detected under the different conformations of the several members of the body"—a proof that advanced and enlightened views on the subject had already begun to take root amongst eminent thinkers of his age. In the year 1621 Dr. Rodolphus Gocelenius wrote a work on Physiognomy while he held the post of Professor of that science in the Academia Marpurgensi; and four years afterwards we find Edmund Gallimard dedicating a "Traité Physiognomique au trés illustre Monseigneur Theophile Howard, compte de Sulfactz." Besides the names we have quoted, we may mention that of John de Judgagnie, who wrote on the science at an early but uncertain date, of which last-mentioned effort we had a translation in the year 1666 from the pen of Fabian Withers, shewing the author to have been remarkably clear and concise in the principles he has laid down, however incorrect he may have been in some of the deductions he has drawn; and it should not be forgotten in his case, that he probably wrote at a very early period, when as yet he could borrow but little light from other sources. The other names which we have not thought proper otherwise to particularize we may give here without comment, in order to afford the curious student an opportunity of looking, if he should wish to do so, at the notions more or less crude, which have in times gone by, been promulgated with respect to this science. Without pretending to give an exhaustive list, we may mention the names of Adamantius, Albertus Magnus, Avicenna, Averroes, Cassidorus, Hippocrates, Melampus, Meletes, Remigerius, Seneca, and Quinctillian; and in reference to this additional list we may add, that in the year 1780 Franzius of Leipsic furnished a learnedly edited translation of the works of Adamantius and Melampus.

Lavater, who was Pastor of St. Peter's Church at Zurich, became a martyr to liberty and truth in 1801. He wrote several works on Physiognomy, which were translated into various languages, yet they were so deficient in system and principles, that they are of little practical value to the world.

All sciences, and indeed all advanced departments of culture, have had to endure persecution at the hands of misplaced and superstitious blockheads in power, or at the hands of brutal and ignorance-steeped mobs; and we do not find that Physiognomy has had any particular immunity extended to it in this respect. In a semi-civilized age, any art that pretended to delineate the character and propensities of the individual, solely by means of the salient points and colours of the exterior, had too close a resemblance, in the jaundiced eye of ignorance and superstition, to the occult arts of sorcery and witchcraft, altogether to escape some troublesome and unsolicited attentions. These kind attentions usually originated with that class of busy bodies which has flourished in every age, and the members of which have always been animated with a burning desire to keep their fellow-men in the paths of that code of virtue which is their own, and which they know to be the right one. Even in these enlightened days, when we are rapidly approaching the commencement of the 20th century, and when many flatter themselves that we have for ever done with those pests of former ages, a very moderate degree of discernment would suffice to discover the modern prototype of the sorcery and witchcraft hunter, in those watchful individuals who are *les enfans terribles* of their own church courts, who have had themselves dubbed "Heresy Hunters" by an indignant public, and who only lack the power and the opportunity to hunt, slay, and burn like their progenitors of three centuries ago, and with an equal zeal for the furtherance of the Glory of God. It will astonish some people to know, that by the 17 George II. c. 5, "All Persons pretending to have skill in Physiognomy are included amongst those offenders who are deemed Rogues and Vagabonds. As such they are liable to be publicly whipped or sent to the House of Correction, until the next Sessions, or any less time, and after whipping or commitment, they may be passed to their last legal settlement or birth-place; and moreover, the Justice may sentence them to hard labour for not more than six months." This delicate attention on the part of the British legislature, at a time when liberality of opinion and breadth of ideas were supposed to have made some considerable progress, is peculiarly touching; and in the year 1817 it seems to have induced Dr. John Cross—no doubt with the view of reaping the full benefit of the enactment—to publish, from the University Press of Glasgow, a work which had for its object the establishment of Physiognomy on scientific principles. This work comprised the reproduction of a series of lectures which he had delivered, and in which he had indulged in the most sanguine anticipations respecting the ultimate triumph of the principles of his favourite study. It does not appear that the legislature ever took any steps to enforce the provisions of this very considerate Act, and we are left to infer that Dr. Cross was permitted to seek his last legal settlement or birthplace entirely at his own charges.

Were we asked to furnish proof of the amount of attention which has been paid in all times and in all ages to the Physiognomical peculiarities which mark the infinite varieties of the human form and countenance, we have an irrefragable one ready to our hand, in the endless varieties of personal nomenclature, all having their origin—in remote times it may be—in the facial and corporeal peculiarities of our progenitors. A few examples will show at a glance the justice of this observation. From Colour we have the names of Brown, Gray, Green, Black, White, Blue, and so on over the entire gamut of the artist's paint-box. From Stature we have Long, Short, Small, Bigg, Little, and many others. From Complexion we have Fair, Dark, Pale, &c. From bodily Strength we have Strong, Force, Wight or Weight, &c.; and in reference to distinctive peculiarities, we may cite Strongarm or Armstrong, Greathead, Greatheart, Longear, Longshanks, Cruikshanks, Longman, and a host of others, some of which will be readily suggested to the reader, and some of which also are capable of bearing very ludicrous constructions. In such historical names also, as Malcolm Ceanmohr (Bighead), William Rufus (William the Red), Philip the Fair, and such like, we have clearly illustrated the distinctive amount of attention which has always been accorded to Physical oddity or peculiarity; and were we to search for further examples in other languages than our own, a mine of illustration would be opened up to us which might be worked successfully *ad infinitum*. But we refrain from swelling our remarks on a feature of the subject which all will readily admit, even although some may have been struck with it now for the first time.

Having thus taken a cursory view of the literary history of the science, and brought it down to a comparatively recent date, we shall, in view of the hopelessness of the attempt to sketch the proportion and scope of the voluminous writings on this subject with which the literature of our day has been flooded, proceed to outline, from a prefatory point of view, the intentions and aim of this the latest, and we hope to convince our readers, not the least meritorious of those works which have for their object the elucidating and elaborating of the noble and comprehensive science of Physiognomy.

A vast amount of time, trouble, and money is expended in the search for new fields of natural Phenomena, &c., wherein to exercise that capacity for wonder and amazement, with which the Divine Head of nature has seen fit to endow us. To gratify this propensity of ours, nothing seems too arduous to be undertaken and no problem too profound to be investigated. For this Central African voyages of discovery are embarked in, the crossing of the Australian Continent is attempted, the Matterhorn is scaled, and the interior of the earth is ransacked. For *this* Arctic Expeditions are organized, Rosse's Telescopes are invented, and Chemical analysis is undertaken. To minister to *this* craving men cross the Atlantic in a shallop and attempt to swim over stormy arms of the sea. For *this* numberless lives are lost in the watery wastes of the sea, and in the howling wildernesses of the land; and for *this*, from first to last, millions of money have been dissipated and oceans of blood have been shed. And yet how blind is all this wasteful expenditure of force and energy! Neglected subjects of wonderment are continually to our hand, before which, in the deeper and more legitimate sense of wonder, Matterhorns, Polar Seas, Earth's crust, and Ocean's bed dwindle into mediocrity and insignificance. To cite one subject which more immediately concerns the matter we have now in hand, we have but to look around us in the pursuit of our ordinary avocations at the amazing variety of form and feature which the human face exhibits. Whence comes this infinite variety, and what is the intention and aim of the all-powerful intelligence in diversifying so infinitely the results of that operation of its workings which we have accustomed ourselves, somewhat vaguely, to call Nature? The members of the human family are brought into existence all possessed of the same *general* characteristics, the same organs of locomotion, of sight, smell, hearing, breathing, and touch, or, to speak in language more to the point, all have heads, eyes, noses, ears, hair, mouths, chins, breasts, arms, hands, fingers, stomachs, vertebræ, abdomen, generative organs, legs, feet, and toes. If it be objected that absolutely all are not thus endowed at birth, and that abnormal specimens are not unknown, we answer, that this circumstance is in no wise either antagonistic or favourable to our premises, except in so far as that the rare exception contributes only the more firmly to establish the rule. For a general proposition we may assume, then, that all are endowed at birth with the same *general* characteristics, and in view of this, how calculated to excite our wonder is the fact that notwithstanding this general similarity, nature yet so diversifies her operations, that not one single human being is produced exactly like another. And not so only when applied to contemporary beings, but were it possible to reproduce the human race in its entirety, since the advent of man, no two individuals taken from these countless millions would be found to be alike. In view of this astounding diversity of lineament, so vast as almost to take away one's breath at the contemplation, it would be mere imbecility in our vain endeavours to find a solution, to throw ourselves into the arms of "Chance." Modern research has now left "Chance" not a leg to stand upon; there appears to be no such thing as accident in nature, and every effect, however seemingly insignificant or fortuitous, is the result of the operation of that inscrutable intelligence, which, working within well defined and unchangeable laws, wields the destinies of this universe of ours. There is not the very slightest variation of the human form and countenance, which is not the result of well defined causes of production; and we have only to formulate—as is done in the science of Physiognomy—these results, to acquire the power of deciphering nature's own hieroglyphics with unerring accuracy. As no two outward forms are exactly alike, so, and in just precisely the same degree, do no two inward forms or characters bear perfect resemblance. We may endeavour to divine the design of the Author of creation in enacting from all time a law so unchangeable and so pregnant with weal or woe in its right or wrong comprehension and application to the human race, but as a matter of absolute certainty we are unable in the order of things to grasp at the motives of Omnipotence. There is, however, little doubt that the Universe, and the various organisms with which it is peopled, have been designed for the creation, occupation, and abode of that ethereal essence, the highest, infinitely the highest, organism of which we can have any conception, the SOUL. As, however, we have to do more with the material aspect of the subject in question, we shall not take up time and space at present in metaphysical deductions.

Notwithstanding this broad and almost illimitable diversity, as exemplified in the individual, we find society as a whole riveted together in the closest bonds; and that element of individual diversity, which at first sight we might suppose to be calculated to have a disintegrating effect, is on a closer inspection found to be the very strongest welding ingredient which goes to form society. The mind, as it were, utterly defeated in the effort to take in the idea of the human race individually, seeks refuge in the contemplation of it as a great whole, and the same principle tends throughout to weld the mass together in the closest bonds of union. And it is not presuming too far to say that in these features we plainly discern the design on the part of the Divine agency to preserve distinctly together the two elements of individuality and union, the two separated by a well defined line of demarcation, and yet at the same time bound together and dovetailed on the most intimate footing of fitness and expediency. A harmonious union alongside of a distinctive identity we find maintained with the most beautiful precision, and all this accomplished notwithstanding the infinite multiplicity of names, and the antagonistic action of thousands of other causes, which would at first sight seem overwhelmingly destructive, but which become harmless when brought into close contact with nature's decrees.

We have seen that the varying effects of this action on the part of nature's law are illimitable in number, and likewise we find that the causes which produce those effects are also countless in their character. Every conceivable variation of condition, however minute and however seemingly unimportant, exercises its influence on the interior and exterior, and goes to produce Physiognomies of innumerable types and forms. Ante-natal influences, such as the mixture of the blood of different races and nationalities; the immediate conditions surrounding the parents, and thousands of influences acting upon them previous to conception; the various causes which tend to produce mother's marks; fashions wielding strong though often unsuspected influences upon nations and individual members before birth and throughout life; climatic agencies moulding and shaping the form and destinies of millions; altitude, with the hand of a master artist, colouring and laying on her tints and hues according to her strength and capacity. Heat and cold asserting their rights and stamping their effects. Food in its various quantities and unnumbered qualities affording varieties of expression and difference of strength to the varied forms of organization; customs, habits, and fashions, with their elevative or depressive tendencies. The very air which fans the brow of man tones up or down his spirits; the west wind bringing enterprise and progress; the northern blasts lending staidness, stability, and determination of purpose; the changeable and ever varying breezes from the mellow, sunny south, making us petulant, changeable, and faultfinding; and the dire east wind inducing a gloomy, morose, and foreboding state of mind in those who are subjected to its baneful influences, and warping them out of calmness and placidity into irritability and mental tempest. Sickness slowly but surely cutting her seams upon the visage; Avarice drying up and shrivelling the entire organization; Study and mental labour furrowing the expressive brow; Love warming and tinting the face; Hate blackening and hardening the visage; Hope lending a cheerful halo to adorn the countenance; Aspiration elevating the features and inspiring the soul; and thus it is with every sentiment and emotion which has its abode in the human form.

We have hitherto looked at Physiognomical phenomena from an independent stand-point, and watched, as it were, its manifestations from a distance; but we now proceed to a closer inspection, and endeavour to point out and particularize, in a prefatory way, the conditions of those manifestations as displayed on the exterior of the human form. We have only to watch the first dawnings of intelligence on the face of an infant to find this principle of nature, viz., the relation of mind and character to external form—asserting its unmistakable existence. How eagerly the little face scans the lineaments of a stranger, and how quickly the pleased smile or the frightened wail follows upon the verdict for or against which nature teaches it instinctively to bring! The maternal yearning of the mother clothes her face in lineaments of the deepest tenderness, and attracts in unquestioning reliance, the confidence and assurance of safety in the child; and as its Physiognomical studies are extended, it quickly learns to crow and laugh in the face of the benevolent stranger, or to bury its affrighted head in its mother's lap at the approach of malevolence. Were it not for this inborn principle, infancy could have no impressions of love or terror whatever, because, at that period the reasoning faculty is latent, and does not arise in its strength until long after the truth or error of the first impressions have been tested, and tested we may add almost invariably, with the result of endorsing in the fullest degree the fidelity of nature to its law. The mind of man is alternately a prey to every conceivable variety of emotion and feeling, and by turns it is possessed by joy, desire, dislike, hatred, grief, love, courage, despair, confidence, contempt, admiration, cowardice, cruelty, pride, modesty, scorn, compassion, spleen; or by the intellectual capacities, reason, attention, discrimination, observation, retention, comparison, wit, taste, imagination, intuition, &c., &c. Each of these feelings and emotions has itself reproduced and photographed in some lineaments of the exterior; and each of these pictures has its distinctive characteristic, as accurately defined and distinct, as its prototype of the interior. In proportion as any particular emotion, or set of emotions, holds sway in the human breast, so in proportion does its photograph, picture or Physiognomical equivalent, become more conspicuous and less evanescent; and it is the promise of the Science of Physiognomy so to formulate this unerring reproduction of the pencil of nature herself, as to enable its student to read the messages from the interior with unfaltering accuracy. The mind long given up to bursts of uncontrollable passion, like a tempest-tossed rudderless ship, draws a picture of the strife within with a brush of no uncertain tint, and we can see the gusts of mental fury indexed on the swollen visage, and sweeping across like a storm-cloud during the hurricane's rage, leaving at last traces that become indelible, and that chart out in livid bands the predominant passions of the victim, as well during lucid intervals of fitful quietness, as in the heat and fury of the wasting mental strife itself. On the other hand, the countenance of the habitually philanthropical, faithful to the inner emotions of which it is the index, presents the calm unimpassioned but still yearning solicitude for the welfare of others, which is so easily read by all, whether old or young, and which attracts so powerfully the confidence and reliance of the broken and oppressed. The constant sway of ennobling sentiments within wreaths the face into the loveliest proportions, and invites the gaze to dwell there as it might wish to dwell, on the peaceful landscape, smiling under the weight of a bountiful harvest. In either case and in all degrees that lie between the two, of whatever hue or texture, the picture becomes engraved deeper and deeper, and it can be read at last, as easily during sleep as in waking hours, with the predominant passions active and at work. The lineaments of the exterior perform the same functions and indicate intelligence from the interior with the same accuracy as the index of the telegraph, with this important difference, that while the language of the latter is momentary and evanescent, that of the former partakes more of the character of a painting, fixed, indelible, and fading only with life itself. The Physiognomical operator can take messages with as much fidelity as his more humble brother of the telegraph needle; he pays nothing for his information, but the trouble of observing; and if he has the talent, he may turn it to account, to an extent which is absolutely unbounded and illimitable. This law of nature which ordains that all the emotions of the mind must of necessity be figured on the exterior, is one fraught with the very deepest interest to mankind. It holds out a book to be read in broad day, a book of the most surpassing interest, and one whereon the educated appetite never palls; a book in which all read to some extent, although it may be, and indeed most frequently is the case, that such reading is engaged in unwittingly and unconsciously. The merest tyro in Physiognomical education can draw treasures from this storehouse; and no one, however mean his capacity, can possibly pass through life without making some progress, however unwittingly and unknowingly. It is, however, to the diligent and purposeful student that Physiognomy unlocks her richest stores and unfolds treasures of untold wealth, incomprehensible in their magnitude to the uninitiated. Were this law of nature fitful and capricious in its enforcement, and open to be thwarted and negatived by the action of foreign and disturbing forces, then indeed half its value would be gone; but this fixity and unchangeableness is the chief ingredient in its composition, and thanks to this, we are enabled, after having graduated in Physiognomical Science, to draw deductions and conclusions with the most absolute precision and certainty. This doctrine may give an unpleasant shock to some who have been flattering themselves for years in the fancied success which has seemed to attend their efforts at disguising the outward manifestation of their inward emotions, and it may be astounding also to others who may not have thought or speculated much on the subject. We are willing to admit that all efforts to disguise the countenance are not quite barren of results in the direction desired and designed by the disguiser; but let us see in what consists the small element of success which we are willing to accord. It is certainly not produced by the unaided talent of the disguiser, whose art can really go but a very slight way in the direction in which he aims, and before the accomplished Physiognomist the flimsy veil which—he lays the flattering unction to his soul—is a screen of the most impenetrable opacity, is seen through like a clear glass, and torn to shreds as soon as it is set up. It is painful to us to seem so cruel in thus mercilessly exposing the worthlessness of the defences here erected, but we hope to convince that we are cruel only to be kind in the balsam, which, before we have done, we propose to offer for the cure of the bleeding and defenceless ones. The Science of Physiognomy in the advanced stages to which it has recently attained, is comparatively so little understood generally, that we are aware our dicta on its comprehensiveness, and the undeviating course of its laws, will not at first be universally, or even very generally, accepted, but it can afford to wait with time on its side. We accorded *some measure* of success to those who fancy their ability to disguise their features has hitherto been crowned with *complete* success, and this modicum of success we opine to be the deception which is effected upon simple and unthinking people. The effort to disguise is superficial and on the surface, and it succeeds only with people who are themselves superficial, and whose mental investigations never go below the surface. This may be poor comfort, but it is all we can truthfully afford in the circumstances. The attempt is an outrage on the laws of nature, and nature with a just retribution revenges herself.

The degree of intelligence within is faithfully portrayed on the lineaments, and in highly endowed beings we have the reproduction without of the fertile soil within in a picture of the most sparkling brilliancy. The light of intelligence and genius ripples and dances over the visage, making a picture fit as a resting place for the eye; while, on the other hand, at the extremity of the opposite scale, where vacuity and barrenness of thought placidly reign, we have the vacant expression of idiocy and mental eclipse mirrored in a visage equally devoid of expression. There is absolutely nothing within, and in accordance with the inflexible laws of nature, there is and can be nothing expressed without. We have the needle of the disused telegraphic machine, but the galvanic battery does not exist, and the one is equally inexpressive without the other. We have in the face here a faithful signboard of the empty warehouse within; there reigns barren emptiness, and the face is negatively intelligent and truthful when it honestly announces the fact in such a way that all who interpret rightly may understand. In the former case we have what has been tersely but graphically and eloquently expressed as a speaking countenance; and in the other we have in equally terse, graphic, and eloquent phraseology—vacancy.

The benefits which accrue to the diligent, indefatigable, and painstaking student of the Science of Physiognomy are simply incalculable in number. In no other department of acquired information or education can it be asserted with more force of truth, and with less deviation from plain matter of fact, that true Physiognomical knowledge is a gem of intrinsic value, esteemed highly when properly comprehended. The ability to read with unfailing accuracy the characters of his neighbours, to put his finger on their foibles, and in fact to lay bare their weaknesses, if the knowledge of the science is accompanied with talent, puts into his hands a lever of the most powerful character. That this power is dangerous in the hands of the unscrupulous can hardly be denied; but the element of danger can be eliminated by the general spread of Physiognomical education, so that, without contracting the actual power of discernment of the talented unscrupulous, which it clearly could not pretend to do, educational progress would make the science so general, that they in their turn would have their character read, their wiles exposed, and their influence avoided. What, therefore, at first sight might be deemed a dangerous, not to say mischievous, power, placed in the hands of a few, would, by the operation of the perfecting law of nature, and the general adoption of Physiognomy as a branch of the ordinary scholastic curriculum, finally result in greater openness of character, since attempts at disguise would be fruitless; more sincerity of conduct, since hypocrisy would gradually find itself devoid of a rag to cover its naked deformity; more benevolence of disposition, since malevolence would find itself everywhere exposed and everywhere scouted; and in fact it would gradually be found that the purer sentiments alone would pay, and that the indulgence of vicious habits inevitably led to exposure, ignomy, and disgrace. We are not so sanguine as to hope for a very early realization of this prospective state of things, but of this we are assured that come it will, following swiftly on the footsteps of the onward march of Physiognomy, as a science of universal application and utility, when the formulæ become household words, and when it will be as rare to find a man ignorant of the first principles of Physiognomy, as it is now to find one who does not know his letters.

In a commercial point of view, too great stress cannot be laid on the importance attached to the study of Physiognomy, and in this connection a curious and interesting feature strikes the observer. The whole fabric of our commercial prosperity rests upon the degree of reliance on faith and honour, which one man can place in another. When the proper balance of credit is maintained in a community, the members of that community are carried on with the steady stream of comfort and prosperity; a healthy social condition obtains, and a feeling of mutual trust and confidence is induced, which becomes stronger and stronger, and more and more conduces to the happiness of its members, in proportion as this principle is held inviolate. When a system of reckless and blindfold trust in all and sundry is engaged in; when dishonest and unscrupulous men find it as easy to obtain credit as their upright and fair-dealing brethren, then follow bankruptcy and ruin, bringing in their train untold misery and woe on the heads of the innocent and helpless. In order, then, to conduct business to a successful issue, and to steer clear of the shoals of insolvency and bankruptcy, the merchant must have at his disposal means of some kind or another by which he may be able to separate the wheat from the chaff, the honest from the dishonest. If his path would not be one of blind and aimless direction, in which he would have an infinitely greater chance of ruin than of fortune, he must found the principles of his transactions upon some assured basis, and one would think that the scope and conditions of this basis would require to be laid down with the utmost precision, and defined within the narrowest limits of rule and compass, so as to ensure the realization of the end which he aims at, and at the same time to act as a guide-post to warn him, at the numberless turnings of his commercial career, of the dangerous paths which can only be trodden at the hazard of commercial existence. Yet we find the prudent, cautious, and successful, in numberless counting-houses, jogging steadily and assuredly on in the path to prosperity and fortune, without any well defined rule of action so far, at least, as the superficial observer can discover. He appears capriciously and at random to give unbounded credit in one quarter, and in another to refuse trust to the extent of a sixpence. He throws himself warmly into one enterprise, while to another of an apparently equal promise he promptly and unhesitatingly shews the cold shoulder. For one man he becomes security to the extent of thousands without enquiry, while to another he insists upon the strictest scrutiny into the state of his reputation at the bank, demands from him references of the most unimpeachable character, and finally, perhaps, notwithstanding the favourable appearance of the man, and the highly satisfactory result of the inquiries respecting him, he closes the negotiation with an emphatic shake of the head. Notwithstanding, however, all the incomprehensibleness of this system, or rather want of system, as it would appear to some, no reflective mind can doubt for a moment the existence on the part of the merchant of rules of the most undeviating character, which he never loses sight of. And what then is the secret? Simply that the successful man of business, however much he may ignore the fact, is invariably a Physiognomist of a very high order. He is a successful merchant, in fact, in the same degree as he is a successful Physiognomist. The terms are synonymous in his case. There may be successful Physiognomists who are not successful merchants, perhaps, indeed, not merchants at all; but on the other hand, there is not and never has been a successful man of business who is not at the same time, although, we repeat, perhaps unknowingly to himself, an accomplished Physiognomist. This quality enables him to select servants of the stamp suited for his business, and to avoid and discountenance those who could co-operate with him only to his disadvantage. It is this faculty of his which explains the seeming caprice of his conduct in dealing with business correspondents; and it is by this knowledge of his that he is enabled to separate the wheat from the chaff, the commercially dishonest and the rotten speculation, from the safe man and the good investment. It would very much puzzle such a merchant, as the one instanced, in taking a retrospective glance at his career, to discover how he had unwittingly become engaged in the study of Physiognomy; when his education had been commenced, and most of all, he would be astounded at the fact that he should have graduated in the science with honours, and obtained by means of it social dignity and position, rank and fortune, without ever having suspected that there existed such a faculty as that of reading the inward character of a man by his outward lineaments, far less divining that in himself this faculty was developed to so high an extent, as to exert the most paramount influence upon his character, his prospects and his happiness. While we thus see the immense importance of the science to men of business, we must not forget that considerations more or less directly springing from it, enter into every conceivable phase of society; and we do not hesitate to affirm broadly, that nineteen out of twenty of all the lucky hits, and the same proportion of false steps, are traceable to a due observance on the one hand, or to neglect or ignorance on the other, of the laws which nature has enacted in reference to the portraiture on the exterior of the prevailing feelings and passions of the interior. We meet the principle actively at work every hour of the day: in our homes, in the street, in the market, in railway trains, in steam boats, in the church, in the law courts, and in fact, everywhere, where man comes in contact with his brother man. It is simply this faculty, powerfully developed, of reading the face of man like a book which goes to form the character, and which constitutes the success in life of the clever shop salesman. He is a fair practical Physiognomist of a high grade, it may be, without knowing the fact. His opportunities of study are vast and continuous, and when this coalesces with natural talents of perception, he becomes what is known as the clever salesman, whose services are valued by the silk mercer and other tradesmen at the very highest figure, worthy in fact to be employed at any price. In a large retail silk mercery establishment, such a man is a source of very considerable revenue to his employers, by reason of his success as a salesman. This success, as we have said, consists in his Physiognomical knowledge, as applied to the features of the shopping portion of the community. When a new customer enters the shop, our clever Physiognomist has his character dissected in a trice, by means of the salient points of the exterior. He takes in during the first few minutes' survey his customer's predominant characteristics, and decides at once as to his foibles and his weaknesses. To one he is cringing—almost abject—in his servility, laying on the unction of what we may call passive flattery with an unsparing tongue. To another he is calmly dignified, and to a third he is almost defiant. He knows in a second what kind of attitude to assume to each customer, so as to please and conciliate the various tastes. He divines at once where the ordinary servility of the shopman would be distasteful, and where a demeanour of respectful and courteous equality would best please. To the foolish and the vain he is profuse of bows and salutations, all evincing the deepest reverence and the most respectful admiration. To the suspicious customer on guard against being cajoled into buying more than the one article to procure which he has entered, he is careless and indifferent, but manages nevertheless to take captive the attention on one article after another, all of which he parts with, with a half-regretful air, as if he were throwing them away, and would as soon have kept them as not. He fixes the greedy and avaricious customer at a glance, and manages after a while to allow himself to admit inadvertently that certain lots of goods have been marked at a ruinous reduction of price. He would rather not dispose of them at those ridiculous prices, until he has had an opportunity of consulting his employers. He is certain these goods have been so marked in error, but having aroused the greedy demon within his customer, he allows himself to be cajoled into producing the articles in question, and finally he is even foolish enough to part with some of them at twenty-five per cent. over their shop value, though all the while prophesying a reprimand or even dismissal on the part of his employer. Thus to each and every of the various orders of customers has he ready an appropriate bill of fare, and all with the result of conveying money from the strangers' pockets to his master's till. The adroit salesman, from long practice and his natural gift of perception, divines, with unerring accuracy, the exact line of conduct to adopt, and follows it accordingly, never wearying or disgusting his patrons or the public by an inappropriate course of action, and never tiring until he sees the pockets empty, or at all events, his customer taken to the utmost limits of his purchasing inclination or ability. Any one who has done even a very moderate amount of shopping must be acquainted with the awkward and bungling specimen of shopmen whose ill-judged pertinacity displeases at once, and metaphorically speaking, has the effect of buttoning up instead of opening the pockets of the customer, who in future avoids not only the man but the shop itself, to the detriment of the interests of the proprietor, and to the ultimate undoing of his servant's success. The latter is very probably a more honest, and a better man by far, than the gifted individual whom we have just portrayed, but he is not a Physiognomist, and in this lies the secret of his unsuccess. We have often wondered how it comes that hairdressers or barbers, as a class, are so devoid of this all important knowledge of Physiognomy: and so generally do they disregard its principles, that we have been sometimes well nigh staggered in our belief. Few men like to be reminded that a gray hair, here and there, is beginning to usurp the place of the whilom glossy locks of their early manhood. Few men are so constituted as to be highly delighted when the announcement is made to them, "Your hair is getting a little thin on the crown, sir." And yet despite this fact, the genus hairdresser seems utterly to ignore the circumstances, and, as a rule, he loses no opportunity of mercilessly reminding his customer of the interesting change which is taking place. No sooner is a head put into his hands, than a severe scrutiny is instituted for the gray monitors of the fleeting character of human existence. If happily the hint is unsuccessful, an eager search for incipient baldness is entered into, and if baffled in this direction, he of course falls back on, "a great deal of scurf in your hair, sir; sure sign of an approaching falling off, sir. I rather think, sir, you have neglected to try our 'Eureka Restorer,' never-failing remedy for scurf, sir, eighteenpence a bottle, sir." Now, how abominably distasteful is all this to the average frequenters of the fashionable perruquier's shop, for to the credit of the humbler order of establishments, be it said, that in it this kind of persecution is almost unknown. With some simple people, this *in terrorem* warning is occasionally productive of "Eureka" sales, no doubt; but why not apply the principle of Physiognomy, and learn to read the customer's strength or weakness before running the risk of losing patrons, by announcing what may be truth partly, but at the same time truth which had much better remain unspoken. It is in our own experience, that it is almost impossible to find an establishment of this kind where such persecution is tabooed; and we have been forced to account for the fact, in a way not very flattering to the intelligence of perruquiers as a body. Shop after shop has been tried in the vain endeavour to find a peaceful asylum where one might sit down under one's comb and brush in peace. Failure has only succeeded failure, until we have been forced to submit silently in the sullen endurance of despair. The bright aspirations and dreams of our youth have faded one by one, and we now look for no alleviation until the Science of Physiognomy has so diffused itself throughout the world at large, as to have its principles at last made plain to the meanest capacity, even to the capacity of the hairdresser's assistant. Until this millennium arrives, we submit to be solemnly warned once a month, that unless we come round to a full conviction of the efficacy of the "Eureka" and invest in an eighteenpence bottle, we must speedily wear a crown of unhonoured gray hairs. But joking aside, the loss which uninitiated shopkeepers in general, and hairdressers in particular, inflict on themselves by reason of a neglect of the simple elements of Physiognomy is incalculable; and in this connection we do not think we are too sanguine in prognosticating the speedy adoption of the science, as a common and everyday auxiliary to the conduct of the shopkeeping business—a step which will be conducive to the profit of the shopkeepers themselves and to the comfort and convenience of their patrons.

As a ludicrous instance of the application of Physiognomical acumen to the furtherance of business, we may give the following before finally passing on to other phases, and for the accuracy of the narration we can bring a voucher in the form of the merchant who employed the astute clerk to whom reference is made. In one of the most thriving manufacturing towns of Scotland, in which our informant was, and indeed is still, at the head of a large soft goods warehouse, one of these born Physiognomical geniuses, who could drive profitable sales in the teeth almost of impossibility itself, was employed. Unfortunately, his capacity for usefulness was very much impaired by habits of dissipation which he had contracted, and for days, and sometimes for weeks together, he would absent himself from business. Admonition and advice on the part of his employers having been ultimately found totally unavailing, he was at length allowed to drift unmolested into the exercise of his own option of coming and going at his own sweet will, his services being much too valuable, however intermittent and fitful, to admit of the idea being entertained of dismissal. His presence in the warehouse was always marked by the uncomplaining and even grateful acquiescence of his employers, since it was invariably attended by a very appreciable increase in their revenue. My informant was, on one occasion, engaged in inspecting, in a back part of the premises, a parcel of goods which he had received from the steamer very much damaged by sea water, and a special sale of which had been announced by advertisement and placard. While superintending the arrangement and marking off the goods, he was approached by his Physiognomical assistant, who happened then to be in a humour for working—a state of mind probably superinduced by a tightness in the money market. He had just tackled—as my informant learned afterwards—in the front shop, one of those customers (a lady) who belonged to that class who are insatiably greedy of bargains, and especially sweet on damaged goods, and having discovered her character in half a minute by Physiognomical inspection, he had gone to work. The lady wanted a considerable quantity of a particular article, and she was at once assured that the damaged bale contained precisely the thing she wanted, very little the worse for the sea-water, and at the same time marked at a ruinous reduction in price. "Mr. A——, does that damaged bale include any ——? I want some now." "No, it does not," Mr. A—— replied. "Then we must damage some ourselves," the salesman coolly rejoined; and without further remark he drew from one of the shelves a sound web of the article required, threw it on the floor, and dashed a basinful of dirty water over it. Such was the unquestioning reliance placed on the sagacity of this salesman, that my friend did not think of interfering by a word of remonstrance, though he admits that for a moment he felt assured that this jewel of a salesman of his had at last drunk himself into a softening of the brain. Having damaged the web to his satisfaction, the latter shouldered it, and proceeded to rejoin his expectant customer, whom he speedily managed to make the happy possessor of the damaged goods in question, at a mere trifle over the figure for which she could have purchased them in a sound state. We need hardly say that we do not hold this touching incident up for the commendation or imitation of our readers, but simply as an illustration thoroughly well authenticated, of the influence for good or evil wielded by the clever Physiognomist.

The more we consider the Science of Physiognomy, the more are we struck by the universality of its application in all circumstances of life. If we want to ask a favour of any one, a knowledge of Physiognomy will teach us so to vary our modes of procedure, with varying character, as to reduce our chances of failure to a minimum. By it we are made aware of the predominant characteristics of the party whose good offices we seek to propitiate; and over and above all this we can, by means of Physiognomy, decide as to the particular kind of humour he is in at the time the favour is requested of him, and thus avoid a refusal by judiciously suiting ourselves to his state of mind, or by postponing the matter to a more convenient season. How often is the bungler, to his unbounded astonishment, met with a curt refusal to his request, in a quarter where he thought he was assured of success, while he has only himself to thank for his failure in neglecting the warnings of the Physiognomical index, or in being unable properly to shape and time his petition to the particular idiosyncratic quality of his customer or fellow-man; and thus it is in every conceivable condition in which man and man are placed in relation to each other. During the tedium of a long journey by rail or by water, the value of this power of reading character can hardly be over-estimated. If we feel inclined to enter into conversation, we have the means to our hand of picking out those who are socially inclined, and of avoiding the repellant and hedge-hog kind of traveller; and it enables us not only to do this, but after selecting the individual to be operated upon, we can by it arrive approximately at a sound conclusion as to the particular kind of topic which is likely to prove the most acceptable and the least distasteful; and thus we may accomplish at one and the same time the improvement of our own time in a pleasant and profitable way, and the furtherance also of the profit, improvement, and pleasure of others. We could multiply indefinitely instances wherein a knowledge of Physiognomy would be invaluable, but the limits of our space compel us to adhere only to the more conspicuous of those. Success in life hinges entirely upon the adoption, in youth or early manhood, of that particular calling, trade, or profession which is the best suited to the capacity and bent of the individual; but it is well known, that in the majority of cases the choice of any particular profession is the result of fortuitous circumstances; and it will not be denied that this hap-hazard system results most frequently in the round pin being fitted to the square hole, and *vice versa*. We have shewn that no two human beings are similarly endowed, and as an evident corollary of this, each individual must be better fitted for some one occupation than for any other. To neglect the means, then, of discovering the proper sphere in time is to be guilty of the most mischievous folly, and yet it is rare to find parents going systematically to work in a matter of so much importance, and, as we have said, the decision is left very much to accident or predilection on the part of the parents. Circumspection in this direction is of paramount importance;

but, alas, how often does the prevailing method result in the dissipation of the energies of a lifetime, unillumined by the faintest realization of the hopes which seemed to beckon it on at the commencement. The youth who, as an Engineer or Inventor, would have made a glorious name for himself, passes through life as a Doctor or a Lawyer, struggling and unsuccessful. Young men who would infallibly have taken rank amongst our merchant princes, if initiated at the proper time into the mysteries of commerce, frequently waste a lifetime in seeking distinction in some sphere for which they are utterly unsuited. Young women fret themselves to death in the uncongenial calling of millinery or dressmaking, when they might have been profitably and pleasantly employed in the kitchen or behind the shop-counter; and so of all the various occupations of life. Physical and mental disqualifications for particular walks of usefulness are unheeded at the time of choice, and the result is, that work which should be pleasant and healthful for mind and body, is conducive only to brittleness of temper and general unhappiness. A judicious choice, on the other hand, gives an impetus at the start, which carries them on pleasantly and profitably to that measure of distinction for which they are suited. Above all, to both man and woman, the choice of a partner for life is an act fraught with the weightiest consequences, and in this, perhaps, as much as in any other turning point of life, the paramount importance of a correct understanding of the Principles of Physiognomy shines forth with the clearest brilliancy. Not only our own happiness, but the happiness of our children, and our children's children, is bound up with a judicious or a foolish selection, and it well behoves us to give the matter the very deepest consideration, at so momentous an epoch of our existence.

Apart from a utilitarian point of view, the mere pleasure to be derived from the science is an element which, of itself alone might have sufficed to make it universal in its adoption. When disinclined for more active pursuits, what a vast fund of amusing instruction may be gathered in the contemplation, from a window overlooking a densely thronged thoroughfare, of the various types of countenances which pass and repass in an ever ceaseless flow. The same may be said of a journey by railway or steamboat; and as pleasure is healthiest when combined with profit and instruction, we cannot do better than give this species of it our hearty recommendation and approval. We have tried it for years, and find it an occupation which never palls; and we are convinced that these studies for leisure hours will be more and more entered into as the Science of Physiognomy becomes better known and more widely understood.

The moral element which is bound up with the Science of Physiognomy is one deserving of the deepest and most profound consideration and attention: and we predict, that in the promotion of that science, the philanthropist and social reformer will find ere long their most powerful and most efficient levers for the regeneration of mankind. The swollen basilar visages of the habitually vicious are the direct and inevitable consequences of a life-long indulgence in the worst passions which can take possession of the human breast, and they may well act as a beacon and a warning to the rising generation, of the untold evils which follow in the train of unbridled indulgence, lust, and passion. These are the beacons which tell of the danger-fraught rocks and shoals which lie below, and on which have perished so many goodly barks in life's tempestuous voyage. Once let the moral Physiognomical survey be made, and the moral Physiognomical chart be drawn and laid down, and the voyage of life will be robbed of one-half of its perils, and travellers relieved of one-half their terrors. Once let it be generally understood and admitted that an inward reformation is the sure forerunner of a beautifying reformation in the outward and visible marks of the countenance, and vice will be robbed of one-half of her powers of seduction, while virtue will be reinforced to the same extent. Our prisons and our Courts of Justice would become colleges and museums for the student of Physiognomy, where he would see depicted, in endless variety of revolting delineation, the degraded pictures of the votaries of vice. In fact, the extent to which this lever for the destruction and annihilation of vice could be used is unbounded, and the benefits which would accrue would have an application as wide and universal as the habitable globe. The enormous sums of money which are required in every country, for the efficient maintenance of the machinery for the control and punishment of the criminal population, would be replaced by modest figures, and the energies and talents of our public judicial servants would be turned into other useful channels of work. The general adoption of the principle would have the effect of making so apparent the scoundrel, the thief, and the habitual criminal of whatever cast, that it would speedily be discovered that vice was an article no longer marketable, and that upright and honest dealing were the only passports to a livelihood. It is in this merciless exposure of vice, when the vicious could no longer walk the streets without, in his face, carrying a signboard denoting the rottenness within, that is to be found the most powerful element for the elimination of vice in the future. These unfortunates would be literally starved into a different course of action, and would be compelled, *nolens volens*, to retrace their erring steps to the paths of virtue. It is impossible to calculate the influence which this feature will exercise when the Principles of Physiognomy have reached their acme of development. When Physiognomy is taught in our schools, and when chairs of Physiognomy are instituted in our Universities, then may we mark the dawn of the better time, the approach of the millennium of the future, and a giant stride on the part of the human race in its march to perfection—a perfection which the Omnipotent has enacted from all time to be the fit resting-place for that ethereal essence, the Soul.

BOSTON MEDICAL
MAR 30 1917
LIBRARY

THE FORMS OF THE HUMAN BODY.

"We are all the slaves of our organism."—*Emerson.*

THE question of human responsibility, involved as it is in the metaphysical subtleties, yet pregnant with the weightiest practical interest, has ever been the vexed inquiry of speculative theology. But although I am somewhat attracted to this perplexing field, by the subject I am about to discuss, I shall not here attempt its exploration. I shall leave the metaphysicians to solve the question whether mind is the result of physical organization, or physical organization the result of mind; or to what extent they both act and react upon each other. In this work, strictly devoted as it is to Physiognomical Science, it will be sufficient for me to point out those mental and moral characteristics which, in common experience, are always found in connection with distinctive physical types.

A scientific definition of the types of the human body, as regards the relations and proportions between its various parts, has been attempted even by the earliest writers. Galen and Hippocrates contended that all men could be classed under four *crases* or temperaments, viz., the sanguineous, bilious, melancholic, and phlegmatic. The bilious temperament, according to Hippocrates, is the result of an excess of yellow bile secreted by the liver; the melancholic, of a surplus of black bile produced by the spleen; the sanguineous, of an overplus of blood originated by the heart, and the phlegmatic, of a superabundance of phlegm—a watery fluid consequent upon the action of the brain. The progress of physiological science has shewn us that the brain does not, as the Greek physician supposed, originate a watery fluid, and that black bile is not produced by the spleen, nor blood by the heart. Yet, notwithstanding these errors in the details of Hippocrates' system, his classification, as such, has been handed down through succeeding ages, and is more or less in favour to-day. Now I maintain that this ancient system, and all the modern schemes which have been founded upon it, are essentially false, because they are not based upon nature, and because their terminology is obscure to any but the scientific student.

I prefer, in the consideration of this subject, to discard the word temperament altogether, as liable to grave misunderstanding, and to designate the different classes of men by their different physical *forms*. These forms, which are five in number, I shall consider in the following order. The Abdominal Form; the Thoracic Form; the Muscular and Fibrous Form; the Osseous or Bony Form, and the Brain and Nerve Form. In this order I follow nature in the manner in which she unfolds the respective powers of mankind. I ascend from that which developes first to that which is latest in maturing, from the lower part of the face and physique to the superior portions, and the same order is maintained throughout the entire classification of this book. The number of the classes of the signs of the faculties correspond with the number of forms which the signs and their even combinations represent. Every person, of course, possesses all of these forms, but in the vast majority of instances they are unequally developed, in which case, the predominating form or forms, by marking the leading characteristic, indicates the class to which the subject belongs.

The abdomen is that part of the body which lies between the thorax and the pelvis, and includes the larger part of the digestive apparatus, and the intestines. The form to which the abdomen gives its name may be morbidly increased by entire freedom from care and study, and excessive indulgence in eating, drinking, and sleep. Those in whom it is highly developed have full cheeks, a double chin, one or more wrinkles running round the neck, short and irregular wrinkles on the forehead, almond-shaped and sleepy eyes, a round, pug nose, and general fulness in the abdominal region. They are epicurean in their tastes, prudent, indolent, good-natured, social, and fond of making and of spending money. They are inclined to adipose accumulation, and succeed better in the social circle than in high deliberative or executive functions. The activity of their excernent system gives them the plump and aqueous appearance which is consequent upon an abundance of the vital fluids. Daniel Lambert may be cited in illustration of the abdominal form.

The Thoracic form is highly developed, when the thorax is relatively large. The heart and the organs of respiration are contained within the thoracic cavity, hence mountain air, and mountain climbing; striking the chest rapidly after a full inhalation; running; swimming, and other exercises increase the Thoracic form, by developing the lungs, and stimulating the circulatory action of the heart. Those in whom this form predominates, are fond of amusements, pure air and exercise. They are cheerful and imaginative, but dislike confinement, and are usually averse to study. Their muscles are of a fine and rather firm texture, and they have generally a large nose, with expanded nostrils, prominent and wide cheek bones, protuberant veins, and moderate or small brain and abdomen. They are peculiarly liable to acute diseases, and especially to inflammatory complaints. Cicero was a good example of this form.

As large bones are not always accompanied by powerful muscles, it is necessary to discriminate between the Muscular and Fibrous, and the Osseous forms. Dr. Windship of Boston, although able to lift 2,600 lbs., is a man of small frame-work. The Muscular form is developed by all kinds of energetic and healthful muscular exercise. Those who are distinguished by it are sensitive and energetic. They possess abundant physical courage, and although comparatively slow to anger, are desperate when exasperated. In the purely intellectual powers they are seldom gifted, but when urged to practical exertion by love, ambition, rage, or fear, there are few obstacles which they cannot surmount. They are elastic and amorous, and when irritated become destructive. Dr. Windship, who is a conspicuous instance of this form, told me that light-haired people were the most susceptible of physical development. He is light-haired, and of a sandy complexion. Romulus, Hercules, Achilles, Hector, Ajax, Alexander the Great, William Wallace, and Robert Bruce, all possessed the muscular form. The Spartan legislators paid particular attention to the development of the physique, and to that end ordained that women as well as men should practise running, wrestling, boxing, jumping, swimming, quoit-pitching, and throwing the javelin. To insure a muscular race, they also ordered that all weakly and deformed children should be destroyed immediately after birth. Plutarch informs us that, the better to tone the fibres, the athletic exercises of the Greeks were performed by both men and women in a nude condition. The physical signs of the muscular form are, general breadth of the body, well defined tendons and muscles, heavy shoulders, a nose broad at the base, and a large short neck. The muscles may be developed by vigorous exercise in the shade, but the growth of the bones is dependent on the influence of sunlight.

Those persons strongly characterized by the Osseous form, have a sallow or dark complexion, long limbs and fingers, square shoulders, a prominent nose, hollow cheeks and temples, and straight hair. They are ungraceful in their movements, slow in motion and judgment, but very reliable; awkward in bestowing or receiving a favour, careless in details, and more fond of comfort than display. When this form is supported by a large brain, and general healthiness of organization, it is highly favourable to talent and greatness. Plato, Plutarch, Alfred the Great, La Fayette, Washington, and Lincoln possessed the Osseous, in marked but harmonious combination with the Brain and Nerve form.

The Brain or Nerve form is shown by various external signs, such as an uneven or angular surface of skull, sharp features, thin lips and nostrils, wasted physique, an anxious and discontented expression, a relatively small chest and neck, and a relatively large head. Persons of this form are quick in their motions, keenly sensitive to every species of suffering or enjoyment, and peculiarly susceptible of the influence of alcoholic liquors, opium, tobacco, and tea. They are apt to be dyspeptic, irritable, fidgety, and super-attentive to details. They carry too much sail, and they need a great deal of sleep and healthful food to repair the waste of nature incident to the excitement of their intense lives.

The most important lesson which can be derived from the science of physiognomical forms is, that an appropriate and protracted system of education and living may so modify their relative development as to bring them all into that harmonious proportion which is the condition of the highest mental and physical health. A child, for instance, in whom the brain and nerve form is unduly ascendant, may acquire the Osseous form by drinking calcareous water, and by plain diet, pure air, and light manual labour in the sunlight. All the other forms may be similarly transmuted by appropriate training. The Creator has given perfection of physique to very few of His creatures; but he has arranged the animal economy with such ineffable wisdom and goodness, that all have it in their power to decrease their natural defects, and approximate, at least, to a perfectly harmonious organization. As childhood is the period when human beings are most susceptible of all kinds of educational influences, it is evident that parents and guardians are deeply responsible for the healthy combination of forms in the children whose rearing is committed to their care.

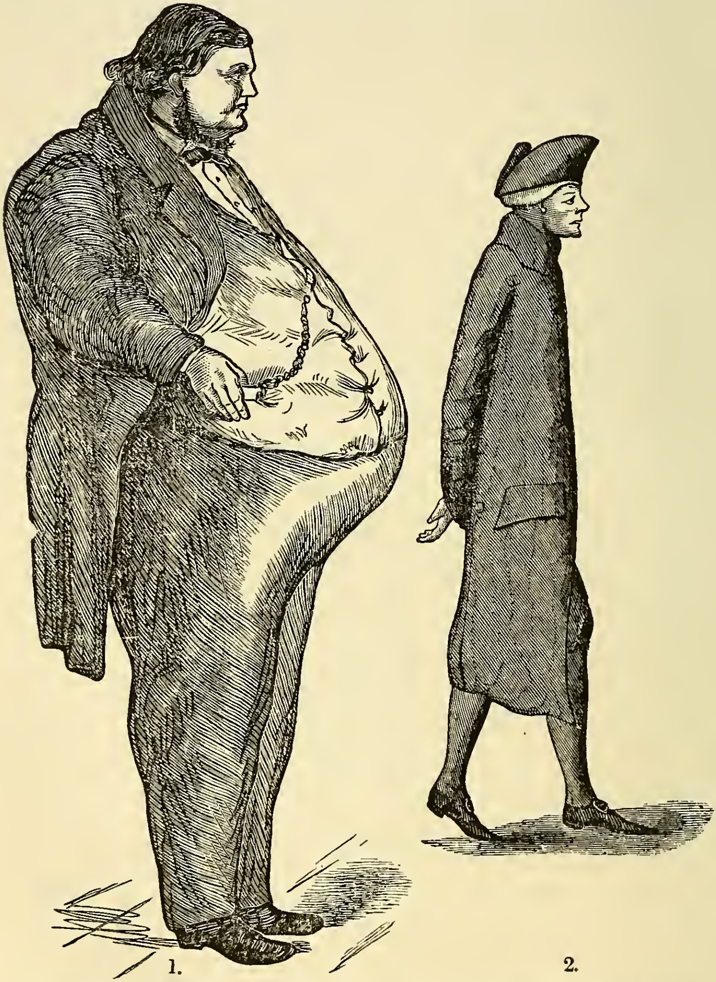
THE ABDOMINAL FORM.

One of the most important lessons which an observant, thinking man can learn is, that there are certain boundaries to human knowledge beyond which he cannot step, without involving himself in the fogs of superstition. The How of a natural law we may define and explain, but the Why sometimes evades our efforts.

We cannot tell why platinum is eighteen times heavier than water. Why chloride of sodium (common salt) always crystallizes in the form of a cube, no matter how often it is dissolved in water. We perceive that the combustion of a tallow candle is caused by the oxygen of the atmosphere uniting with the carbon or tallow of which it is formed, by what we term chemical action, producing carbonic acid gas. But Why this takes place has never been answered.

Why the sun is so much larger than the planets, or why they revolve around him within certain limits, are matters entirely beyond the reach of our reasoning powers. We observe only the facts, and from those facts deduce what we call natural law.

The same rule pertains to our knowledge of humanity. We cannot tell why men and animals with large build in the abdomen are more fond of eating and ease than those of less prominence in this region, and yet from practical observation we discover such to be the truth. To the attentive eye the world appears filled with principles and curious facts, yet none can fathom the reason why of their existence.



1. The Abdominal Form Large.—The Claimant for the Tichborne Estate.
2. The Abdominal Form Small.—Wallace, of Kelly. Copied by permission from "The Characters of Glasgow," published by Mr. John Tweed, 11 St. Enoch Square, Glasgow.

Geology reveals to us the fact that the first living organisms were destitute of bone or frame-work. Every portion of the body was constructed to minister to eating and digestion, which was the great aim of their existence. The stomach occupied the centre, protected on all sides from injury, and the digestive power was strong and active. The Polypi were round bodied, destitute of bone or shell, and from the commencement to the end of their existence, did nothing but eat and digest their food.

As we come down later in the scale of animated life, we discover the Dermal skeleton, or that where the bony structure or shell is on the outside, as in the Mollusca and other shell-fish, together with the tribes of insect life. Still later we have the Neural skeleton, where the bones are inside, as in the horse, dog, sheep, and animals of the highest type, as well as Man.

The law of growth in the world seems to be from the lowest to highest forms of being. As the efforts of the boy are excelled by those of the man, in beauty, perfection, and usefulness; so nature, or the earth, appears to progress in each later age in her productions of animal life.

Races of men make their appearance, reach their utmost capacity, then go to decay, and become extinct. As one of the first acts of life is to eat, so the first nations of men lived mainly to eat. Then came the muscular age of Egypt, Greece, and Rome, where war and labour were the chief occupations, and now still later we enter upon the age of thought and reason. So rarely is it we meet a man of large abdomen, that when we do, we regard him as a specimen of the past age.

Recollect the Abdominal form takes into consideration all that part of the body between the diaphragm (which separates the stomach and intestines from the lungs and heart) and the inner surface of the pelvis. It contains the stomach, liver, and other viscera, and is the fat or olineproducing region—the nutritive and assimilative part of the body. The vital forces are active in this form. What is eaten digests well, and the organs of assimilation store up their material in the form of fat; this cushions up the bones, rounds out the muscles, and gives a plump appearance to the whole frame.

Attendant upon a large abdomen are broad mouth, roundness of chin, cheeks, &c., a softness of flesh (from the presence of fatty matter) to the touch. The eyes are usually sleepy looking; face destitute of expression; pulse slow; movements lazy; in fact, neither quick in action nor thought. To them it is a matter of indifference whether butter is ten or fifty cents a pound, provided they get enough of it. Personal cares hang loosely on their minds, and slip off as easily as their clothing; they never borrow trouble, but are ever willing to lend it; and are always averse to physical labour, or incapable by illness. They may be fitly represented as a bag of food, or a storehouse of fat.

An ordinary tumble does little injury to a man so well padded and protected. Dinners are of more consequence to him than ideas. Such men are never close students, whatever may be their pretensions. Their dreams have never chiselled down their faces by day or night, and their joys are as rarely intense as their sorrows. The glands are all active, and do their work thoroughly; sleep is easy, and tends to assist digestion, while it increases the fatty secretions. Children who sleep much, and assimilate their food readily, are almost invariably fat.

Persons of the Abdominal shape should be especially careful not to overload the stomach with food, as they are liable to diseases of an apoplectic or paralytic character.

Man is endowed with reason that he may overlook and control his appetites and passions, and thus keep in a healthy condition the whole animal economy.

The principle involved is like that of a threshing machine, too much grain chokes up the apparatus, and the whole force is lost; so the vital organs become clogged, and disease and death ensue. Men who are large in the Abdomen are unexcitable, their ideas are as undefined as their bodies are destitute of angles and points. Daniel Lambert, in England, was a remarkable specimen of the Abdominal shape, and Dixon H. Lewis, long time senator in Congress, from the Southern States, was another, in America.

They are subject to such diseases as inflammatory rheumatism, dropsy, and similar complaints. Mentally they are indolent, sensual, cowardly, unambitious, and deficient in enterprise. Those characteristics naturally invite the insolence and oppression of others. The inhabitants of Central Asia are principally of the Abdominal shape, and they are wanting in dignity, energy, and enterprise.

The English partake in some degree of this build, blended with the bone and muscular attributes, and this combination gives them self-possession and a consciousness of independence. The highest compliment which an Englishman ever pays a foreigner is to tell him that he really took him for an Englishman.

Where the Abdominal characteristics predominate in a nation the character of the people will be social in secular affairs, and slow and easy in domestic life. Women become indifferent to tidiness in housekeeping, as exertion is unpleasant to mind and body, and men of this build make poor and lazy mechanics. Their mental efforts are apt to become confused, the labour of thinking being equally disagreeable with that of physical exertion.

Sydney Smith, the celebrated wit, once sat opposite to a man of this organization at the dinner table, and for a time was profoundly impressed with his solemn, portentous-looking face. After watching and waiting a while, to catch the drops of wisdom he expected to fall from the fat stranger's lips, a huge dish of apple dumplings was placed on the table, when in a moment the half-closed eyes opened widely, stared with delight at the dumplings, and the supposed philosopher exclaimed, "Them's the jockeys for me." Sydney Smith then learned a lesson in Physiognomy which he never afterwards forgot.

In the walks of science and art the fat man takes little delight; to him the thorny path which leads to greatness is an insuperable difficulty, and he is better pleased to reap the harvest which the industry of others has produced, than to work himself in the vineyard.

When boys shew a pre-disposition to this form, they are apt to be untruthful; they enjoy fun, but are physically and mentally too lazy to make it; but when it is joined to the Bony and Muscular form, it gives a keen appreciation of wit and humour. They are sluggish, like the stagnant waters of a morass, and inclined to be impure in thought. Not from such, but among the slim and active, must we look for the regenerators of the world.

Food, when introduced into the stomach, allays the passions, and by calling the vital energies to the work of digestion, produces an indifference to mental action: hence the importance of setting apart proper hours for thought and study. Whatever power is used in digestion lessens that necessary for the brain. Thousands of lawyers, clergymen, and merchants, invite their friends to their own funerals, by rushing into mental labour on a full stomach. A clear brain and a clean stomach are so nearly synonymous, that a sermon on health might be preached without any other text.

Napoleon attributed the loss of a great battle to the fact of his having eaten something which did not agree with him. Charles VI., Emperor of West Austria, ate a dish of mushrooms that caused dyspepsia, and his death. The destiny of kingdoms sometimes hangs in the balance,

BOSTON MEDICAL
MAR 30 1917

which a full or empty stomach may turn in one or the other direction. To eat reasonably is to eat moderately the food best fitted for mental and physical activity, as the fatty or carbonaceous substances taken into the system only serve to maintain warmth, and fulfil no other purpose than the coal does in our stoves. .We should, therefore, abstain from that class of diet, especially in the summer season, when warmth is not an object. Too many people cram and stuff their own stomachs, and those of their children, just the same in summer as in winter, and by that means induce the presence of those fevers which seem to be permanently located in our midst.

When the body is healthy, we can often move among diseased persons with impunity; but when it is gorged with improper food, or too great a quantity, a field is offered for disease to work upon, and death is frequently the penalty paid for such neglect. An enormous appetite almost invariably attends insanity and idiotcy.

Where it becomes necessary to cultivate the Abdominal form, care should be observed in the selection of food. It should be plain, easy of digestion, and taken several times in a day; mastication should be slow and perfect; rest after every meal; sleep indulged in if desired; good temper should be encouraged, and nothing should be allowed to interfere with the mind or body during the process of digestion. The drink, milk and water only, and very soon the viscera will be strengthened, and the abdominal powers will become enlarged and improved.

To repress this condition, the eyes and ears should be kept open, and the mouth shut. We should eat less, and try to work and think more.

By associating with persons whose brains are active, and whose nervous organizations are full of life, the sleepy fat man will gradually acquire habits of thoughtfulness; contact, by the law of sympathy, will induce greater activity in the torpid brain, and each succeeding effort will prove easier than the former; until at last, in the place of a human being devoted like a hog to the solidification of carbon, in the shape of lard, we have a man fulfilling the nobler destiny of solving the great problems of life and motion with which the world is overflowing.

The use of alcoholic drinks, in all cases, tends to a degeneracy of the body, producing the Abdominal form. The hydrogen, which is the basis of alcohol, produces temporary warmth at the expense of the destruction of the tissues of the body, and inclines the stomach and liver to fatty secretions; this is the reason we see so many bloated faces around our too numerous saloons; and when disease once takes hold of such a subject, he is almost sure to be hurried off to that bar, where, it is said, men give an account of wasted or well-spent lives.

Personal salvation must begin by controlling the appetite; pure souls are not to be found in impure bodies, and before we can be born again, a fitting temple, swept and garnished, must be prepared for the regenerated spirit. Associate, then, with persons who are intelligent, observe and copy their habits and manners, and in time the burden of fat will fall from you, and additional weight of brain will take its place.

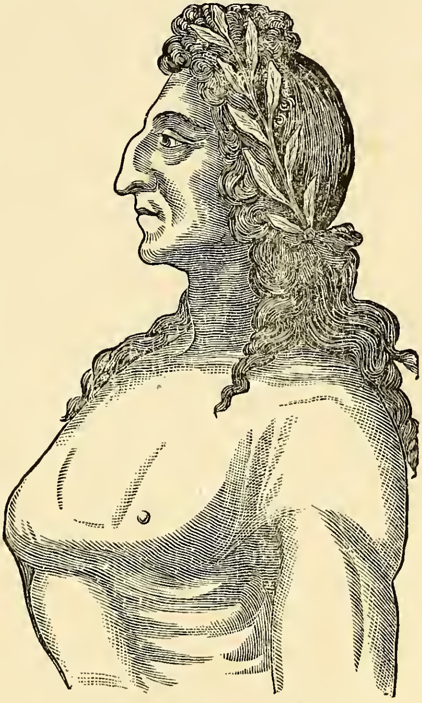
This large Abdominal condition has many times been cast aside, and exchanged for muscle and brain. Sleep little, eat seldom, study much, bathe daily in cold water, climb the mountains, and there, while respiring the pure air, let your soul drink in the great and holy sermon which is preached through nature's beautiful handiwork.

As your thoughts tower away among the hill tops, or recline among the flowery vales, nerve again your whole frame, for one grand effort, to send your spirit, imaginatively, throughout the vast labyrinths and mazes of worlds, rounded and painted with flowers, gladdened with the songs of birds, and decorated with rainbows, blue sky, and glorious landscapes, until you are swinging on airy pinions, 'mid the beautiful Paradise of the Poets.

When your natural condition returns, and you wonderingly scrutinize, and try to divine whether it was a vision, a dream, or noble thought, almost doubting your own identity, then remember one step has been taken to bring your spiritual nature over your gross animal appetites and deadening passions. A hundred such lessons, with daily care and diet, will give you spiritual conceptions, and a thousand similar upliftings, and you will have a spiritual birth. Thus, and thus only, can we develop the mind and spirit, and curb the "Old Adam" within us.

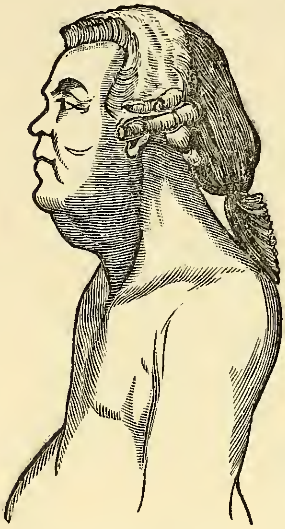
THE THORACIC FORM.

The thorax or chest is the highest of the two great divisions of the trunk in the human body, being situated between the neck and the abdomen, from which it is separated by the large muscular partition called the diaphragm. The chest is protected from external injury by the back and breast bones, and the ribs, which permit the necessary amount of expansion, but prevent so much as would be injurious. It incloses the heart and lungs, with the various arteries, veins, ducts, tubes, which are immediately connected with them, and necessary for their functions. This is not only the great centre of the circulation of the blood, but the laboratory in which is carried on the all-important work of purifying it, so as to render it fit to become the life of the system. Impure or venous blood—impure because charged with carbon—venous because flowing through the veins—enters the right auricle of the heart, thence proceeds to the right ventricle, and is driven from that into the lungs, to be exposed to the influence of the air which has been inhaled through the trachea or wind-pipe. The precious, life-giving oxygen of the air seizes upon, and as it were, burns the carbon of the blood, which now pure, warm, and life-giving, is conveyed to the left side of the heart; while the impure air, called carbonic acid gas, is expelled from the lungs and breathed out through the trachea or wind-pipe. The pure arterial blood is pumped from the heart through the arteries, and circulated in the body by capillary tubes, where it again contracts carbon, and returns through the veins to undergo the same process. As soon as the lungs have sent away the purified blood for circulation, the heart pours into them a new stream of the impure to meet the next breath, and so the process goes on, with silent but mighty and withal harmonious activity, through our sleeping as well as waking hours, from the first hour of life on till the last; for the commencement of these operations means life begun; the cessation of them is life ended in death. The quantity of air taken into the lungs is reckoned as about 502 cubic inches per minute for a grown person at rest during the day, and 400 during the night. But this quantity is largely increased by exertion.



The Thoracic Form Large—William III.

If the respiratory and circulatory apparatus of any individual is in a good condition for accomplishing its work, sufficiently large, and having room for full play, it will appear outwardly in a broad capacious chest, and with this will be associated large nostrils, and prominent malar or cheek-bones. This conformation is found much more in mountainous regions than in low plains. In Switzerland, Scotland, the high lands of California, and in parts of New England we find what we may call the Thoracic shape prevailing; and all the points that go to compose it are conspicuous in the North American Indians. So also the Inka Indians, living on the mountains of South America, have very large and long lungs; they live to a great age, and never suffer from pulmonary disease. Some are said to have prolonged their lives to two hundred years. The inhabitants of the city of Mexico, which is seven thousand feet above the ocean level, are never pulmonic or consumptive, while in the low grounds of that country, such disease is very prevalent. Similar facts are observed in Nevada, Oregon, and Washington Territory, as well as in the mountains of California. All consumptive patients experience relief, if they visit these heights in good time, before the disease has progressed too far. As elevated regions are favourable to persons liable to pulmonary affections, those near the sea are quite the reverse; therefore the climate of London, Glasgow, San Francisco, New York, and other localities situated but little above sea level, should be avoided by persons of contracted chests.



The Thoracic Form Small.

We are informed by Audubon, Wilson, and other Ornithologists, that birds which habitually fly high have larger air-vessels than those which remain in lower air. The wild pigeon, which is capable of such a rapid and extended flight, reaching in some instances as much as three hundred miles an hour, has both lungs and heart large in comparison with any other birds not migratory.

Likewise the bears of mountainous countries have lung-power very superior to that of the same class of animals living in the valleys. Even fish in mountain streams and lakes are found to have larger air-vessels than those swimming in the sluggish waters of the lowlands.

These facts may be thus explained. In low flat countries the atmosphere is denser, and a given amount of air contains more oxygen than it does on the hills; therefore there is not the same necessity for filling the lungs in order to obtain what is necessary to support life. But when we ascend to higher regions, the atmosphere becomes rarer, and we are compelled to inspire more in volume, in order to get the same in weight and efficiency. Another cause affecting the action both of lungs and heart, is, that higher altitudes are (*cet. par.*) colder than lower ones; and as we require more warmth, we must burn more fuel, that is carbon, to maintain the heat of the blood. Consequently, we must not only eat more fat and other carbon-producing matters, but must take in a larger quantity of oxygen to burn it; and then the heart has to send the vital fluid thrilling to the surface and extremities of the body. It appears to be a universal law of nature that use increases capacity; and herein we see the philosophy of sending weak-lunged people to the hills. Not only is the temperature more equable, but the increased action of the lungs steadily enlarges them; the heart as a necessary consequence begins to beat stronger; the appetite improves, because the carbon must be found; good health and spirits are the natural result. Nature responds to activity and use, by giving increase of power, and strength, or profit—thus verifying that old parable of the Talents, where those who used them won others, and were rewarded with increase, while he who buried his for safe-keeping without using it, lost that which he had. Nature destroys that which is not used, and *because* it is not used.

When, however, the Thoracic form largely preponderates over the abdominal, the activity of the heart and lungs may be too great in proportion to other functions; and the very intensity of the fires may destroy the life which they were intended to preserve. Though the broad-chested, large-nosed, wide-cheek-boned mountaineer is no subject for *Phthisis Pulmonalis,* he may be subject to diseases of a characteristic type. Among us, persons who have too great a proportion of Thoracic development are liable to hæmorrhage and inflammatory fevers; when exposed to great muscular exertion and fatigue, they may be afflicted with pleuro-pneumonia and rheumatism. When supported by corresponding abdominal powers, and large bone, muscle, and brain, the well-developed thorax produces true leaders in war. But where it predominates, as in the mountaineers we have referred to, and others among ourselves who are not mountaineers, it marks a type of character easily recognized. The distinct, well-marked features, the impetuous glance of the eye, the animated hopeful expression of countenance, the well-rounded limbs, and fine compact muscles, free alike from angularity and flabbiness, prepare us to find less mental than physical power. Such persons are more disposed for a stirring, active life, than one of study and close application. Their impressions come and go; so do their opinions and religious beliefs, fickle as the wind; yet with a strong and courageous will, they act upon each while it lasts. Again and again have great revolutions been occasioned, and effete civilizations overturned by hordes of such impetuous mountaineers sweeping over the more settled lowlands, and carrying all before them, only to be themselves in turn displaced, when, through ages of luxury, they have lost their thoracic character. So did the earliest bands of the Caucasian race pour down from the Asiatic highlands to settle in Europe, and develop the civilizations of Greece and Rome. But when they became deteriorated, hordes of Goths and Huns, usually called barbarians, descended from the mountains of northern Europe, and took possession in their stead, to become civilized in turn. Still later, the Norsemen came down on old England, and gave a mighty stir to its population. So did the Tartars of high Asia make themselves masters of India, and become the terror of Eastern Europe, dispossessing its less hardy occupants. The traditions of Mexico, in like manner, point to a time when people came from the Andes and Cordilleras to settle in the lower lands and elaborate a new civilization. Populations of rude, elastic, stirring character are bred in mountain lands, to transfuse fresh life every now and then into the more sedentary inhabitants of the plains.

As certainly as Cuvier could describe the general characteristics of an animal from a single tooth presented to him, and Owen, still later, undertook to make drawings of animals never seen by living men, but which lived on our earth hundreds of thousands of years ago; so surely by observing the law of harmony in nature's works, the constant correspondence between mind and body, man and his surroundings, we are able to predicate that which we see not from that which we do see. And whenever we meet a man in whom the Thoracic form is strongly predominant, we expect to find him active and elastic, rather than plodding; disposed to be prodigal in his expenditure; a playful, humorous, caressing, and obliging companion; easily elated by prosperity, and hopeful in adversity; of lively deportment, and springy step; fond of variety, ever astir, never long at one stay. Such a one seldom attains pre-eminence in his sphere, but he may do much to keep his neighbours alive, and prevent social intercourse from stagnating. Let us add, he should never marry one of the same type; he needs a careful, steady, even-going wife, to counter-balance his disposition to profusion and restlessness.

THE MUSCULAR AND FIBROUS FORM.

No portion of the human frame-work is so difficult to describe, as that upon which muscular activity and strength depends. We discover one man weak, another strong, one overflowing with physical vigour, another all feebleness, yet size has apparently very little to do with the matter.

The prize-fighter, by training, is reduced in bulk preparatory to his trial of strength and skill. The race-horse loses weight of one kind, which is replaced by activity and endurance, ere he can win the prize ahead of his competitors.

To determine from whence this quality is derived, will be the subject matter for consideration in this chapter.

It is not sufficient to know that one specimen of life is full of physical force, and another comparatively helpless; but the causes or principles which underlie those conditions must be studied, and to this task we invite our readers.

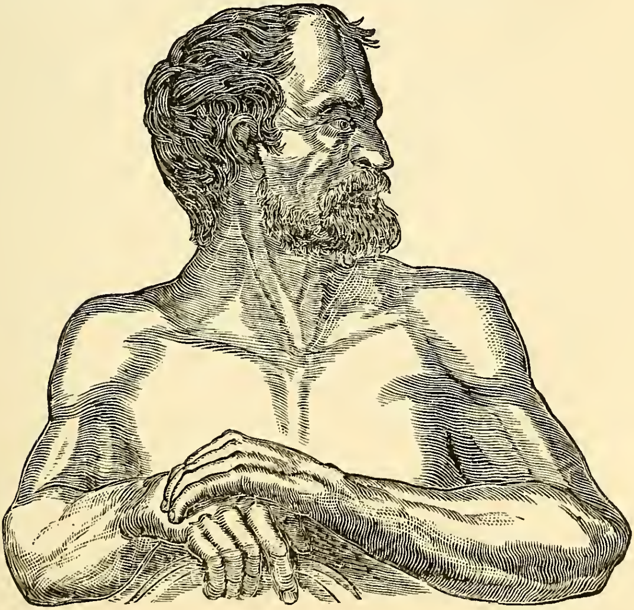
It is from Nature we learn all that we know or can possibly accomplish. The Poet says—

> "Nature hath nothing made so base, but can
> Read some instruction to the wisest man."

The artist sometimes endeavours to teach others to paint a landscape, but you only learn to imitate from him; he, or his tutor, learned the lessons from Nature. The true landscape was painted by her long before man studied her art. The portrait painter but copies the face which nature has so richly tinted; and the photographic artist uses the sunlight to accomplish those well rounded lines of beauty and grace, which no human hand can excel and but few imitate to perfection.

The Electrician pumps small doses of lightning from that great reservoir the earth, but nature furnishes immensely larger ones from the same source.

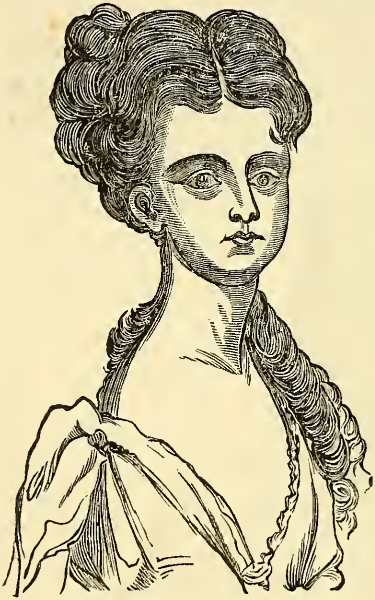
The rocks have been printed indelibly by nature's type, so that the geologist reads her stories, as readily as from a book, and modern civilization but poorly imitates her action, in that art we term the "Mighty Press.



The Muscular Form Large—S. Judas Thadeus.

Navigation is a copy from the Nautilus, which trimmed its tiny sails on summer seas long ages ere man made his appearance on this globe. Our best efforts in this direction, often vainly try to work out safety and deliverance from danger, while this little creature is capable of providing against the ocean storm, and always gains a haven of safety.

Houses were made by the beaver, musk-rat, and other animals, long before the first-born son of Adam built the City of Enoch, and their habitations serve their purposes, as well or better, than many of those erected by man.



The Muscular Form Small—Princess Anne.

The first dwellers in tents but imitated the closing foliage of the arched forest overhead. The walls of the ancient Egyptian temples, leaning inward, are only imitations of that primitive tent, with the pointed top replaced by a flat covering or roof. Thus architecture may be traced, step by step, from savage woodland life.

The tribe of Muras, occupying the forests of the valley of the Amazon, build their houses in the tops of trees, in exact imitation of certain animals which live in countries subject to inundation. Thus we see that nature is the source from whence we draw all our designs, and obtain all our patterns; even the front and back doors of our modern palatial mansions were invented by the chattering English Magpie—a bird whose ingenuity and taste are only exceeded by its everlasting round of trickery and talk; perhaps in this latter respect poor humanity has also some semblance to this denizen of the air.

Thus we might enumerate every trade, art, or profession which man proudly claims as his own invention, and shew they are but plagiarisms on Nature. All we know we learn either directly or indirectly from this great Mother of Life. She is our teacher, and obedience to her lessons implies strength, security, and success.

Anatomy and Physiology are partial studies of the form and laws which govern our being, and Physiognomy requires the utmost accuracy in the observation of nature, to obtain success.

The Muscular system is divided into two sets, known as the organs of strength and motion: the first are known as the voluntary muscles, which respond to the option of the mind; and the other acts independently, as in the motion of the heart, lungs, alimentary canal, arteries, bladder, skin, &c. Those two sets of muscles are inherited previous to birth; consequently we have only to do with their development and cultivation.

In looking at nature, as exhibited in the vegetable world, we discover that of all the woody fibres, that species is toughest and strongest which, during its growth, exhibits the greatest activity or motion. The Elm is an instance of this fact. Its slim branches are constantly swinging gracefully in the air; no limbs bend more readily, and none are harder to break. This law, which unites activity with strength, pervades all the vegetable world; indeed, rules all animate life, and plainly teaches the great lesson, that motion and life, rest and death, are but synonyms of each other.

At the birth of a child, it is unable to stand, or even crawl alone; but as it puts forth effort, strength begins to be developed, and continued activity soon converts a helpless being into one physically or muscularly strong;

vigour takes the place of atony, and langour gives place to lustiness.

Exercise, then, is the great developer of animal muscle as well as vegetable fibre. As illustrations of the fact that active exercise promotes this muscular strength, may be mentioned the cases of the Kanakas, who have been known to swim thirty miles, remaining in the water six hours. The naked castes of Hindostan, the Tasmanians, and Fuegians, who go unclothed in very cold weather, by constant exercise are able to endure cold and fatigue, astonishing to less active races. An Eton boy can climb a tree as readily as an ordinary lad could go up a ladder, and a savage will mount a smooth pole, using his feet like a second pair of hands, and jump from tree to tree, with great agility.

In our own country we have the case of Dr. G. B. Windship of Boston, who, by a thorough training in lifting, pulling, swinging, and the other various manœuvres attending a gymnastic course, has become a perfect specimen of health and strength, lifting 2,600 lbs., or a dumb-bell of 200 lbs. at arm's length. His plan seems to have proved a perfect success. Inheriting, from eight generations of studious men, a disposition to inactivity of the Muscular system, and weighing but one hundred and twenty pounds, he sought to remedy the defect by a course of active exertion, so as to increase his size and strength. To-day he weighs one hundred and forty-four pounds. The *deltoid* muscles on his shoulders are very broad, the biceps in his arms are immensely developed, and his whole body is a miracle of manly strength. He now teaches a gymnastic system of physical cultivation in Boston.

Compare the life of this man with that of some exquisite fop, whose highest ambition is to dress in the latest style, talk flabby nonsense to some coquette, and puff tobacco smoke in the pure air, or squirt the juice upon the pavements of our cities. Windship is a bundle of living nerves and muscles, full of life and energy, while the other drawls, fritters, and "cusses" a noble opportunity away.

In addition to this constant exercise, pure air is an absolute necessity for the preservation of perfect health and strength. Our houses are, generally, poorly ventilated; and when mankind learns the influence of sunlight on the human body, we shall have stronger and better men than at present. This activity in man and the vegetable world works out all unnecessary material from the body, and leaves only the strongest and best behind. The lungs take in at least one-third more air during exercise; consequently, the supply of oxygen for vitalizing the blood and manufacturing muscle is increased; much of our indisposition to move about arises from the presence of this useless, cumbersome matter in the body; and there was a profound philosophy in that ancient system of punishment which sought to cure the lazy scamp by whipping his hide through the streets of a town.

As physicians, we have to be very careful in setting a broken bone, when the individual has been confined to his bed for some months, because there is unusual liability of fracturing the tender bone in another place. Thus we find that inaction causes even the bones to weaken, and become tender, as well as the muscles. How delicate and fragile are the bodies of those stationary mollusks, or shell-fish, when compared to the agile trout or well-muscled eel.

Herbert, the sweet singer of a hundred and fifty years ago, was inspired with the thought of an active, muscular, and healthy man, when he sang—

> "Man is all symmetry,
> Full of proportions, one limb to another,
> And to all the world besides:
> For head with foot hath private amity;
> Each may call the farthest, brother,
> And both, with moons and tides."

When men with excellent Muscular development are well educated, what useful members of society they become. This was undoubtedly what Pope meant when he penned the lines—

> "And praise the easy vigour of a line,
> Where Denham's strength and Waller's sweetness join."

Men who are authors, and at the same time strong in muscular proportions, will give evidence of boldness of conception in natural science, mechanism, or the fine arts, such as only comes from physically strong persons. Dr. Johnson was an exceedingly strong man. Robert Burns, when a plough-boy, could handle any two boys of his age. Shakespeare carried the brick and mortar with which to build the tabernacle in which he afterwards performed his plays before Queen Elizabeth. The shady halls of colleges damped and dwarfed not his great mind. Benjamin Franklin could carry a form of type in each hand up two flights of stairs, while it required an ordinary boy to use both hands to carry one of such weight.

In our present time we have had such men as Professor Wilson of Edinburgh ("Christopher North"), Charles Kingsley, Hugh Miller, Lord Palmerston, Lord Brougham, and a host of others, remarkable for muscular strength and activity, as well as profound learning and authorship. Many of these mounted the ladder of fame from humble life, entirely through activity of character. Some were poor; and here let us say, that one of the greatest blessings to the young is that of poverty, because the very necessities it involves become an incentive to action, which forms the basis of future greatness. Elihu Burritt, the greatest living linguist, laid the foundation of his greatness, in bone and muscle, while labouring as a blacksmith. At the forge, while blowing the bellows with one hand, he held a Greek, Hebrew, or Latin Lexicon in the other; and in the interval, while the iron was heating, he mastered from two to six words of those difficult languages; and while hammering the red hot metal with his hammer, he was busily engaged forging out ideas on the anvil of his brain. This was the price he paid for greatness; and his example is but the key to that law which is universal.

While men frequently work just about enough for good health, women often overwork themselves, especially those who are mothers, and have the care of a house and family.

Legitimate rest is as necessary for health and strength as exercise. The pernicious custom of turning night into day, by woman working long after dark, causes her to feel as if Jael were driving the nail which killed Sisera into her temples, or a tightness as though Luke's iron crown encompassed her brow. Many cases of constipation and headache can be traced to want of sleep from this cause. Then let mothers rest more, and make their idle sons and daughters work.

To give my readers an idea of the advantages of poverty, and how men who have risen, started in the world's great race, I quote the following concerning the origin of noted men:—Columbus was the son of a weaver, and a weaver himself. Claud Lorraine was bred a pastry cook. Cervantes was a common soldier. Homer was the son of a small farmer. Moliére was the son of a tapestry maker. Demosthenes was the son of a cutler. Terence was a slave. Oliver Cromwell was the son of a London brewer. Franklin was a journeyman printer, and son of a tallow chandler and soap boiler. Dr. Thomas, Bishop of Worcester, was the son of a linen draper. Daniel Defoe was a hostler, and the son of a butcher. Whitfield was the son of an innkeeper at Gloucester. Sir Cloudely Shovel, Rear-Admiral of England, was an apprentice to a shoemaker, and afterwards a cabin boy. Bishop Prideaux worked in the kitchen at Exeter College, Oxford. Cardinal Wolsey was the son of a poor butcher. Ferguson was a shepherd. Dean Tucker was the son of a small farmer in Cardiganshire, and performed his journey to Oxford on foot. Edmund Hailey was the son of a soap-boiler at Shore-ditch. Joseph Hall, Bishop of Norwich, was the son of a farmer. Virgil was the son of a porter. Horace was the son of a shopkeeper. Shakespeare was the son of a wool-stapler. Milton was the son of a money-scrivener. Robert Burns was a ploughman in Ayrshire. Confucius was a carpenter. Mahommed, called the prophet, was a driver of asses. Mohamet Ali was a barber. Madam Bernadotte was a washerwoman of Paris. Napoleon, a descendent of an obscure family of Corsica, was a Major when he married Josephine, the daughter of a tobacconist creole of Martinique. General Escartero was a vestry-clerk. Bolivar was a druggist. Vasco de Gama was a sailor. John Jacob Astor once sold apples on the streets of New York. Catherine, Empress of Russia, was a camp grisette. Cincinnatus was ploughing his vineyard when the Dictatorship of Rome was offered to him.

I also make another selection, to show how many of the wealthy men in the city of New York began the great battle of life in poverty.

There are sixty-seven who pay an income-tax of $100,000 and over. The man who leads the list, A. T. Stewart, everybody knows, is an Irish emigrant, who commenced life with a capital of less than twenty-five cents. Jay Gould drove a herd of cattle from Delhi, Delaware County, when a lad, for fifty cents a day, in order to get money enough to reach the Hudson River. David Groesbeck, over thirty years ago, used to mend old shoes for his brother, who was a respectable shoemaker in Albany. Henry Keep, boasts that he graduated from the poor-house of Jagerson County. James Gordon Bennett and Robert Bonner, both poor boys, full of talent and industry. Rufus Hatch, when a youngster, had an ambition to hold the reins of a pedlar's waggon. E. D. Morgan commenced life with a quarter measure of molasses. Henry Clews was an errand boy in one of the banking houses down town. The Brothers Seligman started out in life with a pedlar's pack. David Dows retailed pork by the half-pound, and molasses by the gill; and H. T. Hembold was first cabin boy on the sloop "Mary Jane," that navigated the Delaware. Such men as these were the architects of their own fortunes, and active muscles and brains did the work of their elevation.

We all perceive the growing aversion which exists in the minds of Americans to manual labour, and this is the reason why an essay of unusual length upon its advantages and importance can hardly be amiss, while considering the Muscular build or form. Scarcely a month passes in which several young men have not applied to me for a situation to travel. When asked what they wish to do, they answer,—"They would like a situation where there was not much to do, and without hard labour, yet good wages, and all expenses paid, together with a good chance to see the world." Oh! horrible, lamentable fact! How many such silly idlers the world possesses, and I am sorry for them. I pity them, because their lack of training has doomed them, with all their golden dreams, to disappointment. My answer to them is, I have no such situation, not even for myself. Such young men will refuse positions as farm labourers at high wages, or the opportunity to learn some useful trade. All over the land complaints go up against high prices, which this growing hatred of work causes, while on the street corners of every city may be found specimens of humanity telling such tales as these—

THE LOAFER'S SONG.

"Now I lay me down to sleep,
Musquitoes at your distance keep;
And if I snore before I wake,
'Tis owing to the buckwheat cake.

"Let me dream of other days,
On whisky punch, oh, let me gaze!

On sherry cobblers sucked through straws,
Before they make Maine liquor laws.

"Sing me the songs I used to hear,
When every store sold lager beer,
And every loafer told his joke,
In clouds of poor tobacco smoke.

"Wake me up 'when daylight's o'er,'
I can 't go out with clothes so poor;
For every fellow whom we meet
Thinks I look too mean to treat.

"So I lay me down to sleep,
I wish my thoughts away would keep;
Oh! could he sleep till he were dead,
Rest would come to the loafer's head."

A certain amount of bodily labour is a prime necessity as a promoter of good health and solid happiness; and until young men, and young women also, cast aside the fallacious notion that labour is degrading, we shall find poverty and puling sickness stalking into every house in the land. Discontent, and divorces in ninety-nine cases out of every hundred derive their origin from the idleness of one or both parties. Bear in mind, that honourable labour promotes womanhood and manhood, health, wealth, and that great boon for which thousands are vainly seeking—happiness. When we look over the United States of America, and see the Northern States blooming like a garden; their stately edifices, private and public; their free schools, thriving machine shops, and manufactories; and then contrast the view with the woody, uncultivated south, with its ox-teams and log-houses, its scarcity of schools, and other means of enlightenment, we are forced to the conclusion that the people of the North have toiled and laboured, and time has repaid their well-directed efforts. Whereas the South has compelled its disinterested negroes to do its work, while the white race has grown up inactive and useless, leading aimless lives; and an unthrifty country is nature's reward.

There is a law of compensation in nature, and by this law labour, if well directed, is always richly repaid. Thank fortune that, since the war, the Southern people have become more industrious, and consequently prosperous.

The poorer classes of England and America have been cultivated physically by the labour to which poverty compelled them. There was a time when France and England had no postal system, as at present, and fast couriers were employed to carry letters from city to city. That class of servants or foot-runners were well cultivated, and consequently vigorous and healthy. In France this service was performed by the inhabitants of the Basque provinces, who were very swift of foot. The English runners were very supple and robust, and took pains to keep themselves strong and active by dieting and other means. As a method of physical development, the Carthaginians engaged in swimming. About three hundred and ninety years after the founding of the great Roman Empire, and even at the time when the tyrant Caracalla ruled Rome, the practice of rope-dancing was one of the popular games, and it developed the Muscular system in a remarkable degree. In the days of Socrates, leaping was a common amusement. Alexander had many expert runners whose muscles were finely developed; and Glaucus excelled in many kinds of gymnastic feats.

Not only did the ancients practise fighting, running, wrestling, &c., for health and strength, but they most assiduously cared for their bodies, by currying, washing, and rubbing, &c. Their gymnasiums were amply provided with bathing appliances; and Lucian informs us that the combatants in the arena freely cleaned each other after each combat, if not quite disabled.

Thus we learn what care was taken in ages past to increase and preserve muscular strength, and the millions of dollars and years of labour were not bestowed in vain. We know, by the remains they have left behind them, that the Romans excelled in works of art and grand design, and that their bodies were models of physical and mental beauty. In imitation of this ancient curriculum, the colleges of Harvard and Yale are beginning to see the importance of physical training as a part of education, and are erecting gymnasiums within the walls hitherto sacred to mental labour.

When this change begins to be felt, we shall see our college graduates taking rank equally with the sons of mechanics and labourers in scientific and literary pursuits. Among statesmen and men of letters, we rarely find the sons filling high stations, or making their mark as men of superior worth, for the very reason that the possession of wealth enables them to fritter away their time in idleness; while the mechanic often tries to make a tradesman of his child, whose talents fit him for philosophy, science, or art. The physical cultivation of the mechanic is transmitted to his children, and this natural birthright gives them greater force of character in both body and mind.

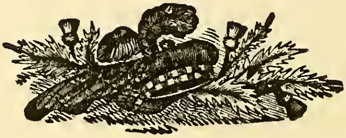
One great cause of physical decline in children is the use of tobacco and stimulating beverages, such as whisky, brandy, rum, gin, wine, tea, and coffee. Living in impure air, tight lacing, concentrated and mixed diet, spices and pickles, hot saleratus bread, and late hours, are all deleterious to health and strength. There are secret sins among the young which are more prostrating to the Muscular and Nervous systems than any of the above mentioned. Then, to be strong in muscle, and of iron heart, that we may insure health and success to ourselves and to our offspring who shall represent us in life's great drama, let us be "temperate in all things," and above all, be virtuous.

> "Count life by virtues—these will last,
> When life's lone-footed race is o'er;
> And these, when earthly joys are past,
> Shall cheer us on a brighter shore."

The Muscular form, being compressed, rigid, and compact, gives such individuals a quick firm step, and generally rapid motions. They usually lack the gentle and tender emotions which we find in the Brain or Thoracic form. They have vigour and intensity in everything; this class is impressive, and capable of lasting attachment. They are noble in ambition, and fearless in enterprise, when possessed of a cultivated intellect. They resemble the muscular animals: the lion, grizzly bear, tiger, panther, lynx, gorilla, &c., all of which are full of physical courage. Such men dare to do for themselves, and usually are quite considerate. They are proud. Being irritable and high tempered, men of this form are vehement, intense, emotional, and strong. Their irritability and emotions affect the liver, which is largely under the influence of the mind, and this causes them to become bilious, or to have derangements of the portal and hepatic systems. They have a very changeable and contradictory temper. In religion they are apt to be remarkably inquisitive, penetrating in scientific investigations, and prying and expert in domestic affairs. Good in all serious affairs, except in prayer; sumptuous in living, and imperious as superiors.

Thus we have given in detail some of the characteristics which attend this build. The type of these men, like the animals they resemble, is broad rather than tall, round, wide head, broad short ear, small eyes, nose wide in its lower part where it joins the face, short broad foot, and a remarkable closing of the mouth when in the act of eating, as if more in earnest in that affair, and at that time, than in any foregone act of life. They should guard well against liquor, for where their animal passions are aroused by its stimulating effects, they are apt to become turbulent, and at times have been known to murder, as they are naturally destructive. A good moral education, and strict temperance, will enable them to rightly direct their surplus force, and save them as ornaments to the world, and from an unnatural and disgraceful death. As action is the great cultivator and cause of physical strength, so in turn it acts again on the animal and man, and demands almost constant exercise. Hence, if such persons are not engaged in some laudable employment, their very nature spurs them on to do something, either right or wrong. They "put an enemy within their mouths to steal away their brains," and allow the system to become unbalanced by the use of alcoholic liquors, or mental derangement ensues, to which this form of individual is quite liable.

This unguided physical force is like a powerful steamer without a pilot, rushing onward, mayhap, to swift destruction. But action is their nature, and act they will, for weal or woe; hence the great importance of teaching those strong boys the true aim of life—self-government and strict sobriety.



THE OSSEOUS OR BONY FORM.

GEOLOGISTS, in speaking of the mountain ranges of North America, refer to the Rocky Mountains as the backbone of the continent, and the lesser ranges as the ribs and supports, branch off from this central system; and we find they bear a striking similarity to the human body, in the apparent support they give to other portions of the earth's surface. As the rocks represent the stable and reliable portion of the globe, so the Bony structure of man and other animals, gives firmness and tangibility of character, which cannot otherwise be obtained.

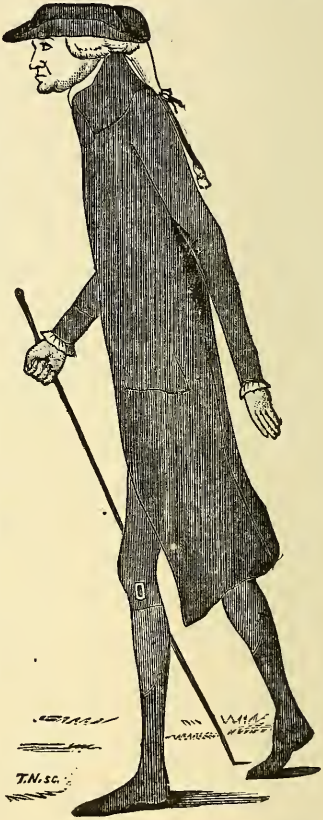
There are two great causes which go to produce and develop large bones in man and animals.

The first comes from nature, in the shape of soil, or food, and water. For instance, the States of Kentucky, Virginia, and Tennessee, are famous for tall men, fine horses, and large mules, among other things that might be named. The foundations of those States are laid in the lime rock, which everywhere prevails under the surface, and the water supply to man and animals is largely impregnated with lime, the material of which bones are made.

Its secondary influence is found in the fact that the cereals are largely built up from this source. The wheat, corn, straw, and hay of those States contain a larger per centage of bone-producing food than is found in many other States.

The second cause is exercise, which grows naturally out of a healthy and rapid bone development. The inhabitants of Tennessee and Virginia, who ride much on horseback, are usually large, lank, and powerfully-framed men. That species of exercise does not call for the use of the muscles so much as other labour, and yet is sufficient to make the bones grow. Prominent men in our own and other countries, are striking examples of the intimate relation between exercise and large Bony structure. Washington, six feet three in height, rode a great deal on horseback.

Lincoln, whose early life was one of much exercise, towered body and mind above his fellows. Lafayette, the great Philanthropist and Franco-American defender of liberty, was one of the tallest officers in our revolutionary army. The exercise of his school days at Chavagnac, his birth-place, developed the boy into the tall and bony man, whose honesty became a proverb. Alexander the Great, Cæsar, Brutus, Mahomet, Cromwell, and a host of others might be named who were all tall and bony men, and the ones, of all others, on whom the nations relied for support.



The Osseous Form Large.—Lowrie Coulter. Copied from "The Characters of Glasgow." Published by Mr. John Tweed, 11 St. Enoch Square, Glasgow.

Strength of bone structure is allied to honesty and reliability of mind. As Owen, one of the greatest Anatomists of the present century, has observed, "The only difference between a wise man and a fool is a few grains of phosphorus more or less in the brain."

So with regard to firmness and honesty of character, a few pounds more or less of bone makes all the difference between an honest man and a villain. Shakespeare was right when he made Julius Cæsar, while he plotted for supreme power in Rome, exclaim—

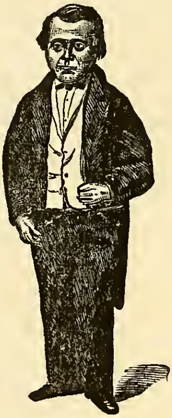
> "Let me have men about me that are fat,
> Sleek-headed men, and such as sleep o' night;
> Yon Cassius has a lean and hungry look—
> He thinks too much; such men are dangerous!"

He knew that he could bribe and purchase the silence of the plump jolly fellows, but the angular long men were too honest to be bought.

General Sherman is six and a-half feet high, and no more upright and honest man ever faced bullets on American soil.

Ewing, who raised Sherman, said he was the most reliable boy to do an errand he ever knew, and by far too honest for the political field.

When you see a man moving like a tall pine among oaks, rest assured that in connection with his fine bony structure will be found probity of character. Care, however, must be had in arriving at conclusions on this subject, as height alone is not the sole criterion.



The Osseous Form very Small. —Mr. G. W. M. Nutt. "Commodore Nutt."

Some men are not so tall, who have larger bones, in proportion to other portions of their body.

The general appearance of the bones of the face, the squareness of the shoulders, &c., are signs which indicate the prevailing bone build. Prominent wrists, knuckles, nose, cheeks, and forehead stand out plainly, as if to say, here I am, you can depend upon me in case of emergency.

You will observe that in all the portraits of Lincoln, the bones jutt out all over his face; and his honesty (notwithstanding his villifiers) has marked the pages of history, as it did his features, with indestructible glory.

Andrew Jackson was another President who knew no bribery or guile; and the rough bony face of the man would be the best monument to his memory, as integrity and virtue last longer than marble, and are more truly ornaments of human character.

Wellington was made of more bone than any other material; and as his fame reverberates from valley to hilltop, again and for ever, no dismantling has left one gem less in the great crown of honour which ever encircles his name.

The highest type of animals, and those most useful as servants to man, are the horse and ox. They have large bones, the presence of which is manifest in the arch of the eye, at the hips, in the legs, shoulders, and other observable places.

On the other hand, the most worthless and deceptive animals, such as the skunk, fox, porcupine, American panther, and animals of the cat tribe, are small-boned and full-muscled, and of little or no service to man, and quite dishonest and untrustworthy.

The camel again is an animal of large bones, and see how much service he affords in carrying human beings across the pathless deserts of Asia and Africa. The camel takes his exercise in sunshine, while the skunk, fox, coon, cat, and other small-boned animals prowl about at night, retiring to the darkest shades at break of day, while the panther buries himself in the underwood or gloom of the forest.

Large bones are as much an evidence of trustworthiness in men as in animals; and the influence of sunlight and exercise tends towards developing the Bony structure, while the reverse action deteriorates it.

The bankers of London, at the present moment, are puzzled to devise some plan by which their clerks may be kept honest. We say, the only way is to procure from the country districts boys who, by the exercise necessary to farm life, have finely-developed bone forms, for with this class of organization will be found stable honesty of character. Perhaps some finely-dressed city fop may wink, and wince, and say, a country lad could not do the business, he would be "so green." We reply, that George Peabody was a country boy, who had an excellent physical constitution, the foundation of which was laid in country life. Nearly all the London and New York bankers were raised in the country, and do not seem to be so green as the city fops, who never mount the ladder of fame, or wander abroad except after gaslight.

As a general rule, persons unused to reading character scientifically, measure the characters of persons by themselves. A mean man is well assured that others are as mean as himself. A miser supposes the love of money the ruling motive of action in bargain or trade. The thief says, "I would like to see the fellow that wouldn't steal if he could;" and in this way ignorance "measures another's corn in its own bushel." Small-boned men, whose souls are of the same diminutive build, can divine no motive but selfishness in the most generous actions, or in the lives of the world's greatest philanthropists.

Large men, whose bones bear a full proportion to the other parts of their bodies, will be found to be decided, firm, persevering, honest, honourable, hopeful, slow, and sure; enduring, constant in affection, poor politicians, progressive in science, good providers in a family, peace-loving, yet full of moral courage

Variations among members of the same family may frequently be observed. The father may have very large bones, and the mother very small ones, and the children might inherit the individual qualities of either parent exclusively, or a commingling of both. Bone culture is an inheritance not confined to one generation, but permeates through a long series of ancestors, and, like liberty, or any other of the great blessings of humanity, its price is "eternal vigilance."

While marriages are contracted without due regard to fitness of organization, the children born under such circumstances will not only vary, but are likely to deteriorate; consequently every child should have especial education and training to preserve and bring out the best type of man.

The poorer the structure, the greater care is required to develop better conditions. It is the poor farm that needs the husbandman's nursing hand. What a stupid mistake those parents make, when they train up their delicate, puny children to be tailors, shoemakers, &c., thus dooming them to a life of disease and early death.

They should have been sent out into the sunlight and pure air, to gambol and play the livelong day, or to swing the axe, to climb trees, or take any exercise that would in some measure remedy their poor fortunes.

It is time we should learn the fact, that labour out of doors in fresh air is physical salvation, to be followed, not preceded, by mental safety and beauty.

We refer our readers, who desire to learn more fully the effects of Bone culture, to the chapter on "Rectitude" in this work, or the succeeding book. When the Bony form becomes allied to Brain form, we have men of great genius. Cicero, Locke, Tasso, Petrarch, Shakespeare, King Alfred, Tyndall, Wickliffe, Liebig, Morse, and thousands of others were specimens of this combination of bodily and mental strength. This form gives decided features and well-marked physiognomies, which indicate energy of character and honesty of purpose.

Bone-brain men are slow of motion, strong of mind and body, possessed of untiring energy and powerful passions, which make them disregard the grovelling law of common life, by which the bulk of mankind are governed. They devise gigantic schemes of adventure, and great and perilous undertakings in the pursuit of science, power, or renown; linked to their purposes by the bony bands of a strong manhood, they pursue profoundly and accurately, without extravagance, the great business of their lives. This combination produces the grave and thoughtful, prudent and doubtful, orderly and mathematical, mechanical and inventive genius—men who are usually dignified and safe in every enterprise. They are firm in step, cautious in their vocations, and penetrating in science.

The following verse pictures men of the Brain-bone make:

"Big was he made, and tall, his port was fierce,
Erect his countenance; manly majesty
Sat in his front, and darted from his eyes,
Commanding all he viewed."—Œdipus.

Or, as Shakespeare has remarked of large men—

"Why, man, he doth bestride the narrow world
Like a Colossus; and we petty men
Walk under his huge legs, and peep about,
To find ourselves dishonourable graves."

Most of the Bone-brain form can labour and think with apparently little exhaustion, and to be great requires that capability in an unusual degree.

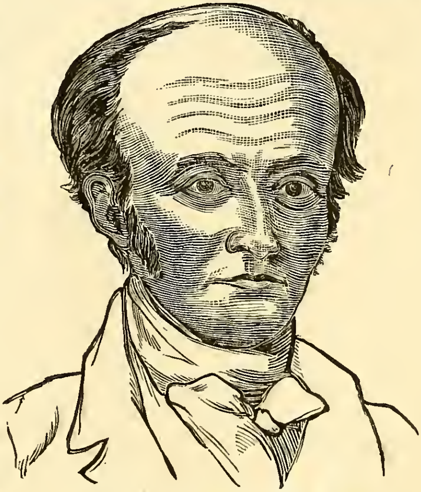
———— "'Tis hardship, toil,
'Tis sleepless nights, and never resting days,
'Tis pain, 'tis danger, 'tis affronted Death,
'Tis equal fate for all, and changing torture,
That rear the mind to glory, that inspire
The noblest virtues and the gentlest manners."
Thompson.

With these facts before us, how important becomes the physical development in this direction, what nobler work for parents and educators than building up a good solid basis upon which to rear the future fabric of civilization? Men of strong arms, broad shoulders, and prominent foreheads are to be the coming pioneers in all great deeds.

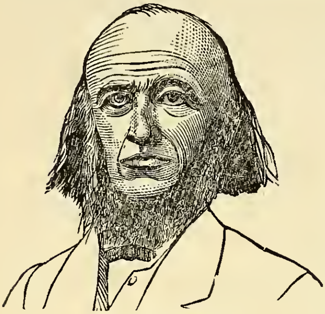
Yet remember, that while every male child born in the United States is eligible, by law, to the highest office in the gift of the people, but few ever become qualified to fill the position of President. So with our children, the possibilities of their training are infinite, but the actual facts of it will depend upon the earliest attention being given to exercise that shall increase the growth of Bone and Brain.

THE BRAIN AND NERVE FORM.

AMONG all the forms of the human system, the Brain and Nerve form is the most important. To the rest it sustains the relation of master, for to it all others are subservient. Or if we compare the human system to a family, the brain may be said to be the husband, the digestive organs the wife, the bones the oldest and sturdiest son, the muscles the youngest and most mischievous son, and the heart and lungs the only daughter. The Brain and Nerve form being thus at the head, requires and ought to have more attention paid to it than is given to the other forms, as the health and working power of the head of a family—the bread-winner should be looked to—though not exclusively, yet, with a preponderance of care; and where this is done, it will be found that the upper part of the forehead predominates in width over the facial organ-

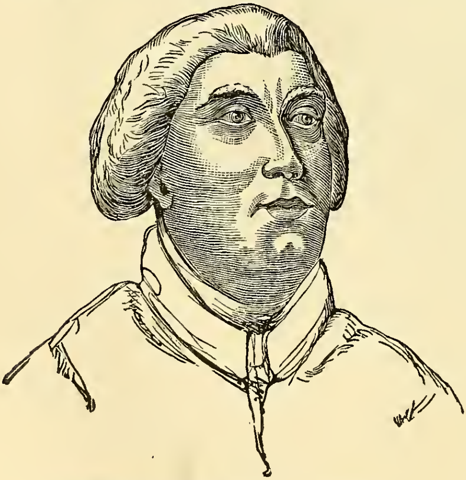


The Brain Form Large.—John Price, a learned critic of England.



Dr. Spraker.

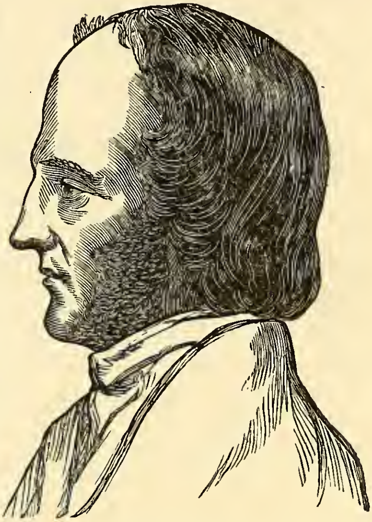
ism or cheeks. Of this the likeness which we give of President Spraker, who was for a number of years President of Wittenberg College at Springfield, Ohio, is an excellent illustration. For years he was a great student, lectured, taught, and preached, and thus strengthened and developed his brain by hard toil until it became, as the reader may notice, proportionably larger than any other part of his organism. Persons in whom this form predominates may always be set down as thinkers, with inclination to hard work; so that, generally speaking, it is impossible for them to become fleshy. The truth of this proposition may be verified any day in any of our high class educational institutions. The round cheeked, full-faced boy, who has hitherto lived for the development of his abdominal form, enters one of our colleges with a determination to work hard; and he is not long there until he begins to exhaust more than his average vitals are able fully to recuperate; so that he very soon becomes, gradually and perceptibly, thin of face and spare in framework, convexities and concavities make their appearance in his face; and just



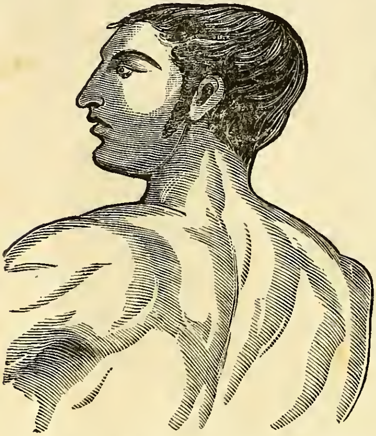
The Brain Form Small.—George III.

as old ocean is deepest where its waves and billows are most stupendous, so these Physiognomical signs constitute unmistakable evidence of a clear thinker. Deep lines and strongly marked protuberances bespeak originality of thought and profundity of mind; still, on the other hand, as the smooth and placid lake must of necessity be shallow compared with the heaving ocean, a smooth unwrinkled face declares a feeble mind, quite unfitted for anything save the surface of things only.

Thus human forms change; the Abdominal, as in the above case, retires, so to speak, allowing the Brain and Nerve form to become regnant; and in whomsoever this takes place, there will be found inclination to study, to behold, to write, to teach, to lecture, to superintend or plan; in short, there will be found the thinking mind. A large brain and a fleshy body do not seem to be able to draw together; and hence, when the Brain and Nerve form predominates in a man, the flesh seems to pass imperceptibly away, leaving leanness and spareness behind it; at least, it is in harmony with observation, that the man of large, thoughtful, clear brain-power is as to his make-up lank and lean. And so Shakespeare says—"Yon lean and hungry Cassius, he thinks deeply and reads men well." "He cannot sleep well o' nights; oh! that he had more of that rounder, sleeker, fatter head, and could sleep better o' nights."


The Brain Form Large.—Rev. S. H. Tyng.

The Brain and Nerve form is of all the other forms in the human system the most exhausting; and this being the case, with what solicitude and care it should be watched and trained; and in order to this, how anxious we ought to be to understand its working, its tendencies; the food best suited for its healthy and vigorous action; the recreation most suitable for it after hard work, and all its other diversified necessities, which, to be ignorant of, is almost certain to shorten life. Sleep restrains and refreshes this form, as does also physical labour, when not of an over-exhausting character. The other forms of the body are in a sense as important as this; but this being the age of intellectuality, it is thought well in this essay to explain it pretty fully in plain and intelligible terms, so that, having a knowledge of its nature, requirements, and the influence it exerts over the whole system, our readers may be in a position, humanly speaking, to ward off disease which, where ignorance prevails, is ever found planting its heavy foot upon the mechanism of the brain.



The Brain Form Small.—Thomas Cribb, Champion of England in 1811.

The brain, being the seat of sensation, is related to all parts of the body by a beautifully designed system of nerves, so that, whatever organ may be damaged, the brain suffers with it. The brain may be said to be the guiding form; but this is true only in a relative sense, for without the soul or "the Divinity that stirs within us," the brain would be blind, or at least would be incapable of rational action. The body, according to the Scriptures, is the temple of the living God, and ought to be the repository of the highest and most noble thoughts. How important, then, to sustain it in good order; to ward off disturbing elements from its various functions, so that it may pursue its intended course without let or hindrance! And how can this be done, save by means of that food which nature has provided for it, and that work for which it is so evidently adapted? We have said that the Brain form requires the greatest care; and, considering its relation to all the other forms, how important its healthy and proper training. Everybody knows how detrimental it is to have frequent sudden rushes of blood to the brain, but how few there are, comparatively speaking, who have learned to avoid such an evil by avoiding the cause or causes. Hence the frequency of what is sometimes called nervous exhaustion, which would be more properly termed paralysis of the brain tissues. Whatever tends to derange the nervous system, deranges the brain, and much of the domestic unhappiness of which we hear is attributable to no other cause save this, that the habits of society are against a healthy nervous system, and consequently against a healthy Brain form. Husband and wife take into their systems enormous quantities of strong tea, spirituous liquors, &c., all which irritate the brain, and what ensues? Constant dissatisfaction, fault-finding, disrespectful retorts, squabbling over the merest trifles, so that the domestic hearth, which should ever be the home of peace, becomes turbulent with unhappiness. An English gentleman once went to his minister, and told him that his house, from being one of the happiest homes in the world, had come to be a little hell. His wife and he, he said, could not sit five minutes together without indulging in the most irritating language, and as this was known to the children, indeed observed daily by them, he felt things to be almost intolerable, and wished the minister's counsel. "You are a heavy smoker, I think," said the minister. "I am," replied the gentleman. "And your wife, if I mistake not, indulges largely in tobacco, though that is not generally known?" "She does," answered the gentleman. "You are both in the habit also of indulging in spirituous liquors, especially at night?" "We are," confessed the gentleman. "And you drink very strong tea?" "Yes," replied the gentleman. "Then," said the minister, "I am not astonished at your domestic unhappiness. Indeed, it is a mystery to me, knowing what I have known all along of your habits, that you are not both in a lunatic asylum. Go home and give your wife money, and send her to one hydropathic establishment, and go you to another, remain there three months, and during that time give up the noxious things I have mentioned, and at the end of that time come back and tell me how you feel." The minister's advice was taken; the old habits were given up, and at the end of three months a new life dawned upon that house, peace and happiness reigned supreme; and why? Because, by carefully avoiding food and drinks having a tendency to derange the nervous system, the Brain form was kept in a healthy condition, and thus all tendency to irritability was subdued.

When we say that the brain is the seat of sensation, we are but repeating what physiologists of all classes know to be a fact. Once let the nerves proceeding from the brain be destroyed, and the mind ceases to act; the person sinks into a more or less insensible condition, and sometimes becomes unconscious altogether, either of pain or pleasure. Sir Astley Cooper, a celebrated British surgeon, gives an instance of this, which excited much attention at the time at which it happened. A man (see Preshaw's *Elements of Human Anatomy and Physiology*) who, during the days of Lord Nelson, had been pressed on board an English ship, received, when sailing in the Mediterranean, a fall from the yard-arm, and when picked up was found to be insensible.

The vessel soon after making Gibraltar, he was placed in an hospital there, where he remained for some months, still insensible; and some time after he was brought from Gibraltar, on board an English frigate, to a depôt for sailors at Deptford. While he was at Deptford, the surgeon under whose care he was placed being visited by Mr. Davy, then an apprentice in a London Hospital, said to him, "I have a case which I think you would like to see. It is a man who has been insensible for many months; he lies on his back with very few signs of life; he breathes, indeed, has a pulse, and some motion in his fingers, but in all other respects, he is apparently deprived ot all powers of mind, volition, or sensation." Mr. Davy went to see the patient, and on examining him, found that there was a slight depression on one part of the head. Being informed of the accident which had occasioned this depression, he recommended the man to be sent to St. Thomas's Hospital in London. When admitted into that Hospital to undergo an operation, it was thirteen months and a few days after the accident. The depressed portion of the bone was elevated from the skull. While he was lying on the table, the motion of his fingers went on during the operation, but no sooner was the portion of the bone raised than it ceased. The operation was performed at one o'clock in the afternoon, and at four, when Sir Astley was walking through the wards, he went up to the man's bed-side, and was surprised to see him sitting up in his bed. He had raised himself on his pillow; and when Sir Astley asked him if he felt any pain, he immediately put his hand to his head, which showed that volition and sensation were returning. In four days the man was able to get out of bed, and began to converse; and in a few days more he was able to tell where he came from. He recollected the circumstance of being pressed and carried to the vessel; but from the moment of the accident, up to the time when the operation was performed, his mind remained in a state of perfect oblivion. For thirteen months he had been dead so far as his mental powers were concerned, but by removing a small portion of bone from his brain, he was at once restored to all the functions of his mind, and almost all the powers of his body—a most remarkable proof of the statement we have just made, that the brain is the seat of sensation, without which neither pain nor pleasure could be felt; and an illustration of the care with which the Brain and Nerve form should be attended to, and everything tending to its derangement excluded from the system. Not only by such an accident as we have described, and by an over indulgence in stimulants, is the brain deranged. He who overloads his stomach with the most harmless food, or most innocent drinks, must of necessity do injury to his nervous system, and through the nervous system so delicately connected with the brain, cannot avoid doing mischief to that form. Hearty suppers immediately before retiring to bed, engender unpleasant dreams, and unpleasant dreams it must be admitted by all, have a tendency to weaken the organization. That, in so many cases, fatal disease, called congestion of the brain, is not unfrequently occasioned by the very things of which we are speaking. After a succession of horrible dreams, brought on by indulgence in late suppers, the brain becomes what is commonly called "flattened," or "softened; the person still sometimes thinkins," but cannot think consecutively; by-and-by the memory ceases to retain; its shelves are suddenly emptied of all its stored-up knowledge, so that the sufferer is unable to conduct intelligent conversation, even of the simplest kind; the faculty of comparison seems to go into oblivion; then judgment vacates her throne, and the individual dies. We do not describe an imaginary case. That doctor's practice cannot be very extensive who does not know that such cases are common, and in an untold number of instances, the disease has been brought on, as asserted, by over-loading the stomach prior to sleep. Wise men are not gormandizers. They eat moderately, drink moderately, sleep well, and thus avoid that nervous irritation so detrimental to the thinking powers. For the most part, the authors of the eighteenth century and before that era, both British and Continental, were poor, and probably to their poverty, as much as to their genius, we are indebted for those works, whether of history, science, poetry, music, or descriptions of society which now enrich and adorn our libraries. Those men were saved from gormandizing for want of means, they lived on extremely simple fare, because they were compelled to do so, and who dare say that, if the reverse had been the case, the works which have made them immortal would ever have been written. From garret rooms, shabbily furnished, sometimes containing only a bed, a small table, and a rickety chair, and which seldom saw a richer diet than the plainest bread and butter, and often not very much of that, came forth those thoughts before which Kings and Cabinets have humbly bowed, and which have done so much to advance the civilization of the world. These men lived not for the stomach, but for the brain. They were compelled to keep the body under, and bring it into subjection, because they had no means of doing otherwise, and to this compulsion the world owes a vast debt of gratitude for her brilliant thinkers and towering genius.

But even men who live sparingly, and never indulge in anything save the simplest food, are apt to bring disease upon the brain. They are hard students, live a secluded life, are seldom seen in society, think and compose often when other people are asleep. Their increasing study goes on for years, it may be, without any apparent evil consequences. But the time comes when the strings of the brain, so to speak, like the over-screwed strings of a violin, snap, leaving their possessor a mental wreck. Hugh Miller was a great student. His works are voluminous, and he indulged in no superfluous writing. But who can think of his sad end without feeling that it would have been better for him had he contented himself with the half of the literary labour to which he was devoted. "What brought you here?" said a gentleman one day to a brilliant preacher and popular author whom he found in a lunatic asylum. "That which will never bring you here," was the sharp reply. "And what is that?" asked the gentleman. "An over-wrought brain," replied the lunatic sternly. To keep their thinking powers in a healthy condition, our literateurs require to work according to a system. Four or five hours *per diem* at most is quite sufficient for the most active brain to work, and these should be in the early part of the day. Then in the afternoon let them do a little gardening, or let them ply the axe, hold the plough, or play at golf or cricket, or any other harmless game; they will thus encourage digestion, strengthen both bone and muscle, and, in short, do their duty to that temple in which the living God deigns to dwell. The man who acts thus returns to his brain work with a keen zest; thoughts of the noblest kind crowd upon him; difficulties vanish; his pen moves surely and rapidly over the paper; his thinking powers never become sluggish; and after accomplishing more work than those who, by over-tension of the brain, gradually commit suicide, he falls asleep in a ripe old age, supported with the idea that he has left his footprints on the sands of time, and that his example is worthy of being followed. Compare a case like this with that of Hugh Miller, who, after years of incessant brain toil, in which it was evident that he was gradually committing suicide, deliberately loaded a pistol, and in a fit of mental derangement, shot himself. Let young men take warning. Be thankful if nature has blessed you with a superior Brain form, but see that that form receives from you the treatment it requires. It is at once the most important and most tender form in your constitution. Certain of your bones may be broken, and still you may live a useful and happy life. You may, like Dr. Kitto, lose your hearing and ultimately your speech, and yet do something for which posterity will feel grateful. Nay, you may be deprived of the organ of vision, like the Puritan John Milton, and notwithstanding this, leave behind you that which will make your name immortal; but indulge in anything, whether too much eating, too much drinking, or an over close application of your mental powers, by which your nervous system is thrown out of order, and your Brain form stultified, and the time may come when, instead of feeling life a blessing, you will feel it to be a curse, and will go down to an early grave, if not a direct, at least an indirect suicide. This is the age of thinking. The world has passed through the Abdominal epoch, the Muscular epoch, &c., and now we have reached the Brain or intellectual age. Think of the time when scarcely any one could read, save the priests, who depended for much of their power on the ignorance of the people, and compare that age with the present, and behold the contrast. That was the age of chivalry, when men lived in their lower natures; this is the age of thought, in which men fight, not with sword, and spear, and lance, but for the most part with their intellects. And who can contemplate the result of our haste toward increase of knowledge, and thirst for literary fame, without being impressed with the words of Henry Ward Beecher, when he says, "the literary field is like unto a battle-field, a grand slaughter-house."

Now, if any of our readers are conscious of having gone astray in this matter; if they feel that they have failed to do justice to their Brain form, and are in consequence subjects of pain and suffering; let them seek deliverance from their condition now. Let them cease to do evil, and learn to do well. Appliances of all kinds may be tried, but so long as the cause is at work the disease can never be removed. The sun is capable of drying a piece of wet cloth when brought under its influence, but in order to this you must cease pouring water on it. Let this be done—that is to say, let the cause be removed, and the sun will speedily dry it. And so it is with a deranged brain—that is, a brain out of order, whether by over-eating, over-drinking, or over-working. If you find that the food you use does not agree with you, give it up, and try something else. If you find that tobacco or spirituous liquors impair your Brain power, why certainly, then, forego them. Or if you find that your eating and drinking are simple enough; but that you are bringing disease upon your brain by over-working it, then in the name of common sense, do take warning and refrain from the use of your mind, and whatever taxes largely your sensations. Unless you are very far gone, nature can restore you to former health, and all your powers to their wonted activity, but only upon condition that you avoid those things which have caused the disorder. Brain power is like Muscular power; it grows in strength and vigour, by means of a reasonable and moderate amount of work. But just as a pugilist, however powerful his bones and muscles, will fall exhausted after a prolonged battle, and remain exhausted for months to come; so an over-taxed brain, that needs noxious stimulants in order to make it work, becomes at last exhausted, and exhaustion indulged in brings on congestion, and if that is not removed, death is the result. Sluggish digestion, want of fresh air, sudden excitement, whether of a sad or joyful character, with a thousand other things that could be mentioned, destroy the nervous system, affect the brain, make people ill-tempered, and anything but pleasant companions. Nothing can please a man who lives under the power of these things. The day is either too hot or it is too cold. The dinner bell is rung too early or too late. In short, he is not at peace with himself, and consequently cannot look upon life with a pleasant eye. He wears green glasses, which make everything green outside. To such a man life is a living death. Now, ignorance lies at the bottom of all this ignoring of the laws by which nature governs the body in its different forms. How foolish is this ignorance! And how terrible its results! In early life the evil begins. Children go to school, and their powers being over-taxed they grow weakly. The question which parents and teachers ask is not "how much may the child learn, and yet preserve that physical equilibrium which nature desires?"—but this, "how much can the child learn at all hazards?" Teachers are not always the wisest of men. Indeed, perhaps, there is no class of men anywhere who need more drilling in regard to the subject of which we have been treating than teachers. For a number of years children should be taught chiefly through the physical senses. Their memories should not be worked as they are at present in a certain class of schools. In short, parents and teachers, who between them have the training of the future generation, should see to it that the children first of all make body; for it is a fact that the strongest, healthiest, most active, and most successful men are those who, when they were young, studied little and played much; while our weak, irritable, bilious people, are those who had long hours at school when they were young, hard mental tasks, and almost no running about. "All work and no play makes Jack a dull boy," is a proverb the truth of which is verified by experience. But dullness is not the worst evil. The darker consequences may be witnessed in every lunatic asylum and every grave-yard.

* * *

LOCALIZING FACULTIES.

THERE is a tendency in nature to destroy. We have illustrations of this everywhere, and in all ages. As it has been, so is it now. Crops are blighted, fences are laid low, trees are torn up by the roots, houses are razed to their foundations, ships are sunk, and men and animals are suddenly deprived of life. This apparently suicidal tendency is called demolitiousness. On the other hand, nature possesses a preservative power. In her bosom lie those treasures of gold, silver, coal, iron, &c., which, when laid hold of by man, minister so much to human comfort and prosperity. This power, common both to man and surrounding nature, we call concealativeness.

To this nomenclature none can object; but with its *modus operandi* of application among a certain class of teachers it is impossible for us to agree. When you speak of nature as being destructive, concealative, &c., you say what is undeniable truth; but when you presume to descend to particulars, and attribute to one part of nature demolitiousness, to another concealativeness, and to another resistativeness, we are compelled, by the sheer force of evidence, to dissent. You cannot localize these faculties, yet their signs are local and general. You cannot speak of them collectively or individually as being here and not there, as being in the mountain, but not in the ocean, or as being above you, but not beneath you. The spirit that moves in nature is ubiquitous. Its centre is everywhere and its circumference nowhere; and as this spirit is the *onsia*, as the ancients called it, in which all the faculties of nature inhere, we must, by a process of reasoning, trace the different tendencies to that spirit, as we trace the different manifestations of power in the human body to the unseen man within it; and just as we speak of a man doing this or that, and not of his hand doing it, or his eye doing it, or his feet doing it, so is it absurd to localize the above faculties in nature and speak of them as being present here, but absent there. Wherever the spirit of universal nature is, there are the faculties. And as the spirit is everywhere in man's form and in all nature, so must the faculties be. He is a fool, therefore, who would lay his hand upon one mountain and say, here we have demolitiousness; and on another, and say, here we have concealativeness; and on a third and fourth, and say, here we have truth and love; the truth being, that the whole of the faculties inhere in that existence which, for popular purposes, has been denominated nature: only in some places they are manifested in an observable manner, and in others not. Matter we may locate; mind or God we cannot.

To localize faculties is no new thing in the world. The tendency toward it is hoary with age. The literature of ancient Greece and Rome is full of it, and the religion of the Egyptians was founded upon it. Socrates, and Aristotle after him, with all their philosophical acuteness, were unable to perceive that universal nature was permeated with one indivisible spirit, the cause of all existences, animate and inanimate. They clothed certain material things with attributes considered to be divine, and in these material things they believed powers or gods to reside, exclusive of all other places, and in consequence of this they worshipped them

But not only in heathendom do we find this tendency. Even the Jews, with their oracles, patristic traditions, and living prophets, were unable to extricate themselves from its seductive influence. Hence they saw the Great Spirit of the Universe only in certain of His works, and not in others; in those which moved and alarmed, not in those which came daily and steadily; in the tempest which blighted the crops, not in the heat and moisture which made them to spring up, and grow and ripen; in the disease which wasted and ravaged, not in the health which sustained and gladdened the frame for years; in the lightning which smote, but not in the light which smiled; in the eclipse with its lurid darkness, but not in the pleasant sunshine which daily played upon the earth; in the meteor which burst out so ominously, but not in the stars which looked down upon them so purely and benignly; in sudden and unexpected prosperity, but not in the common blessings which were showered upon them from day to day; in the storm which sunk the vessel, but not in the favourable breezes which had borne it along for such a length of time; in the preservation of the individual in a shipwreck, but not in that assiduous care which to so many had prevented shipwreck altogether. Such was the state of things among the Jews; and in modern Christendom, what do we find but the same spirit? Men are unable to worship the unseen. They must not only have God embodied, they must have Him individualized and separate. He dwells in the Pope, it is said; and when men meet his holiness, they prostrate themselves before him, intentionally or unintentionally, believing that the great moving spirit of the universe is hid within the old man's bones and muscles, to the exclusion of surrounding nature. And so, too, among religious reformers. Places are set aside and consecrated, such as churches, &c.; and in these places, we are told, God vouchsafes His presence, as if that Being who shines in the sun, and glows in the moon, did not live throughout all space, and could be walled in by brick and mortar! What is this, we ask, but the localization of the faculties of that unbounded spirit which is everywhere and indivisible!

Against this tendency, then, we most earnestly protest. In God we live, and move, and have our being; and in that God there is an infinity of faculties or powers, all working to one glorious end; but these are not separate and limited, and confined to certain defined parts of space, but are diffused throughout all nature.

The word faculty denotes ability to act or perform, whether that ability be inborn, or developed and cultivated. When Fuller says that the Pope granted him a faculty to set him free from his promise, he means that ability had been granted to him to avoid the fulfilment of his promise; and when Quincey says that the vital faculty is that by which life is preserved, he simply predicates of living existences the ability to preserve life. On this principle, when we speak of the faculties of nature, we refer to the powers or abilities which nature possesses to accomplish ends by appropriate means, whether these powers or abilities operate or otherwise. To act is one thing, the power, faculty, or ability which underlies the act is another and very different thing. Acts performed sustain to the faculty which acts, the relation of production to producer; or, in other words, the faculty is the cause, the act accomplished is the effect: and while effects may be limited, and indeed must be, both by time and space, it is impossible to localize the primary cause.

What we contend for is beautifully portrayed in man, felicitously called a microcosm, a little world in himself. Professor Frazer, of the Edinburgh University, speaks of man as being a bundle of attributes, which is just a reproduction of the oft-quoted idea of England's greatest poet and dramatist,—"What a piece of workmanship is man! how noble in reason! how infinite in faculties!" Innumerable as the sands upon the sea-shore, and full as old ocean are the powers of this noble and wonderful microcosm—man. Here, as well as in the broad expanse above, and in the green earth beneath, are evident tokens of design. As ships are built, and so built as to plough the ocean with as little difficulty as possible, so men have been constructed for a purpose. One man is born a mechanic. He has within him the faculty of appreciating physical proportions, that he may be able to form materials square, round, &c., as the case may be; and as that faculty is developed, we see it controlling the materials on which it acts. Another man is born with endurance. He has within him the faculty of bearing up in extreme difficulties and hardships. Waves that would overwhelm others have no effect on him. His constitution, like the blacksmith's arm, gathers strength by exercise. So it is with the man of scientific tendencies. He is constructed to be scientific. His faculty of penetration, his faculty of generalization and abstraction seem to predominate. He has been born to chain the winds that they may do his behests,—to direct the lightning for conversational purposes,—to traverse the starry-paved firmament, and find out the positions of the planets, and to delve into the dark recesses of the earth, and tell the history of the world by means of fossilized substances. Another man has been constructed for musical purposes. His varied powers coalesce, so to speak, and develop into a beautiful harmony. This man deals with sounds and controls them, and can detect in an instant the slightest discord, even though the performers could be numbered by thousands. But who can lay his hand upon a man and say, here, at this particular part of his complex organism, is the mechanical faculty, or here, at another part, is the faculty of endurance, or at another, the penetrative or scientific faculty, or at another, the musical? The man who acts thus merely assumes or imitates. He does not reason, and if he systematizes his notions into a whole, he systematizes what is and must be false, for his notions have no foundation in principle. Why does he fasten on a certain part of the human organism and say, here we have the mechanical faculty or the musical faculty? He cannot tell, or will answer, that "observation has determined that a fulness at such a point indicates certain idiosyncracies of character;" the observation may be true of the sign, but not of the faculty or principle that is general in nature. He can give no reason for it. He merely assumes and asserts, and takes the sign for the faculty. And as assertions without reasons are unreasonable, and that which is unreasonable, false, it follows that his notions, whether detailed or gathered up into a system, are wholly unworthy of belief. The faculties of man, like the powers inherent in nature, cannot be located. The man who has the mechanical faculty is a mechanic from the crown of his head to the soles of his feet. The man who has the faculty of endurance is an enduring man through and through, not in one bone merely, but in all. He who has the scientific faculty, is scientific, or constructed for scientific purposes all throughout his organism; and the musical man is not musical in part, but from the centre to the circumference of his being is permeated with the faculty of music. There is no location; there is no dividing of the integral parts of a man, one part containing one faculty, and another another faculty; whatever faculties a man has are diffused throughout his whole body, soul, and spirit, as God is diffused throughout universal space. There are signs of faculties, and these grouped into one whole we denominate Physiognomy; but the signs must be distinguished from the faculties themselves. The signs are local, the faculties are not, and it is because these two things have been confounded, instead of being distinguished, that the localizing theory which we have been condemning has found a footing among men.

Here it may be remarked, that man has failed as yet to master even the alphabet of his own nature, and the cosmical system with which he is surrounded—that, indeed, as Sir Isaac Newton once said, we are just like children gathering shells upon the sea-shore, while the great ocean of truth lies before us unexplored.

THE NUMBER OF FACULTIES IN THE HUMAN MIND.

It is implied in the heading of this essay that there is in man a something called Mind, as distinct from that which we denominate matter—physical substance or body. What mind is in its essence, we know not, any more than we know what matter is in its essence. "What is mind?" asked an inquirer once of a philosopher. "No matter," was the reply. "And what is matter?" continued the inquirer. "Never mind," was the laconic answer. These we consider to be the best answers which could possibly, in our present condition, be given to the questions. We know the attributes of matter, at least some of them, but that is all we know; and we know the qualities of mind, at least some of them, and there our knowledge ceases. When we come into contact with a substance which has length, and breadth, and height, and depth, hardness, or softness, or colour, we immediately conclude that that substance is physical, that it is matter or body; and when, by the exercise of our inner consciousness, we find in ourselves the qualities of thought, feeling, and volition, we infer from these qualities that there is some kind of substance or existence in which they inhere, and that substance we call Mind. The qualities of mind cannot be predicated of matter, nor can the attributes of matter be predicated of mind. The two reside together, and in a mysterious manner influence each other, but they are not to be confounded. Materialism, therefore, pure and simple, is, as a system, false. There must be something greater than matter, which produces it, controls it, and gives it endurance; that something we call Mind.

It has been said, "there is nothing great on earth but man, and there is nothing in man great but mind." Sir W. Hamilton was so convinced of the truth of this statement, that he used it as the motto of those immortal lectures now published, which, as Professor of Logic, he delivered in the Edinburgh University; and certainly, taking the term great in its loftiest sense, the great metaphysician was right; for body without mind as a moving principle would sink into nothingness.

The question as to the number of faculties possessed by the human mind has perplexed scientific and philosophic inquirers in all ages. Some dogmatists have professed to master the question, and have been forward enough to put their answer on paper and give it to the world. Others, more penetrating in intellect and less bold, have named a few, leaving future searchers for truth to discover more; but few have been able to see that what we call mental faculties spring up as the ages roll on, and are brought to light by the surrounding circumstances which demand them. Nature creates nothing in vain. She gives only as man requires. Just as a wise man, when travelling through foreign countries, will not cumber his pockets with money, but take with him a bill of exchange by which he can supply himself on his way just as he requires it, so Nature acts naturally and reasonably, bestowing powers only where and when they are needed. The ancients, who were able to do without clothing, and without roofs to their houses, as the lower animals do still, did not possess the architectural faculty which has done such great things in the present day; and Nature did not impart it to them, because in their case it was not required. Architecture, like every other art, is a thing of growth. From the rude, unpolished upright stones of barbarous times, to the beautiful fluted pillars of the Athenians, there was a gradual growth, just as there has been since the time that the then gorgeous Areopagus was built. At first the faculty was given in a rude form, gradually it became brighter and brighter, and is becoming more and more polished still; and who dare say that man possesses it in perfection, even in this the 19th century. May we not say, that notwithstanding the past glories of architecture, there are glories yet to be revealed, in the presence of which the architecture of the present will appear as rude as was the work of the first architects, as compared with that of architects now? And so it is with other mental faculties. They are growths. The demand creates the supply. Reason was given when it was needed, and because it was needed; and this may be said of every power which man at present possesses.

The lower and more animal faculties are, as well as the special senses, common to all mankind; the higher, and more refined, and spiritual, are the products of cultivation and growth. Worship is a matter of education. Prayer is a matter of education. Like monkeys, men are imitative, and take on much from example. The child, under the tuition of a praying mother, will most probably become a praying man; but without such tuition, it is most likely that in this respect he would fail. Prayer is based upon education, like telegraphy. Could any school-boy become an accomplished telegraphist at once, without the necessary drill? The thing is impossible. And so it is with prayer. Printers *learn* to be printers. They are not printers by intuition. A man who never saw a printing press, and knew nothing of types and their settings, could never make an intelligent impression on paper. It is mind under drill and cultivation which telegraphs and prints. Those powers peculiar to Christianity were once but conceptions in the mind of Jesus of Nazareth; but through the instrumentality of those whom he educated, those conceptions have spread through the civilized world, and have produced in men's minds those faculties for worship which we find in the Christian Church. Christianity brought new faculties to men, but these it distributed gradually; and who dare say that that system called Christianity has been exhausted, and that all the powers it can impart have been imparted? Step by step are men being led; and only step by step *can* they be led, until they reach that noble manhood which consists in an innumerable array of received faculties working harmoniously together. The faculty of music, too, is a thing imparted. Many a girl has been set down as incapable of becoming a pianist, who, nevertheless, after careful training, has manifested a power in the art quite uncommon. Without the training, her ear would have remained dull, her voice timber-tuned, and she would have been as unsusceptible of sweetness of sound as a blind man is to colour. The faculty of language is also imparted. No man is a linguist by birth or intuition. Language is learned, and learned by imitation. The Eastern Prince, confined from infancy to mature years, deprived of the privilege of listening to articulate sounds, was wholly unable to articulate. People who are absolutely deaf cannot speak—simply because the want of hearing hinders them from imitating the sounds of the more fortunate. Let, however, their ears be opened, and place them under training, and the faculty of speech will gradually come. A hard-working mind, by severe study and prolonged application, develops new faculties in itself, and these again, brought to bear upon mankind, propagate themselves in a remarkable manner. He who has the musical faculty strong and highly cultivated, will produce that faculty in others. The mathematician who has cultivated in himself the faculty for the right adjustment of figures, will produce the mathematical faculty in others. The philanthropist makes philanthropists; the man of science produces the scientific faculty in his fellows; and by the influence of the philosopher, races of men possessed of the philosophical faculty spring up. Men are not all gifted alike. Inventors and discoverers have faculties which other men have not. Every man is not a Sir Isaac Newton or a Columbus. For ages men had seen apples fall from trees; but it was left to the self-developed discovering faculty of Newton to infer from the fall of the apple that there was a law in nature which might properly be called the law of gravitation. Thousands of men in earlier times had put the question, "Has the whole world become known?" But it was left to the observant Columbus, blest with the faculty of fresh discovery, to find out the Western Hemisphere. Wise men wrought hard, and developed in themselves faculties which others did not possess; and those again, working back upon mankind, produced their like, and quickened discovery in men. The necessity for the Davy Lamp was felt for ages among miners; but never until Sir Humphrey developed in himself the faculty of invention was that lamp, so useful to those who work underground, brought to perfection. Who can read the lives and study the works of such men as these and others, such as George Stephenson, and yet believe that there are as many faculties in one man's mind as there are in another? The system of reading mental faculties by physical signs in the human body is undoubtedly the only system by which the end can be rightly reached; but Gall was perfectly right when he somewhat humorously said that the would-be seers had christened the babe before it was born, when they called it "Craniology," thus confining observation exclusively to the head. He took a wider view of things. He saw that mind wrought through every part of the body, and that, in order to study the faculties inherent or developed by cultivation in the mind of man, every part of the body must be taken into account; and this system he called Physiognomy, a name which we have adopted, as covering the whole field of that investigation of which we speak.

Standing, then, on this platform, we are able to discover what the dogmatic mind has never yet seen. Faculties are yearly being noted, and their signs observed, that heretofore have been unindicated. Still, we dare not say, even from the stand-point of the Physiognomist, that all the faculties in the human mind have been discovered. Lying between the zoophite and the man of cultivation, there is a strange gradation of faculties; but we cannot say that all that is possible within the sphere of mental activity and development has been brought to pass, even in the most thoroughly educated and cultivated of minds. We can tell what we have discovered, but can say nothing of that which has been unexplored. We know that Physiognomy reveals many new faculties, and calls attention to their signs, but we dare not say that Physiognomy has as yet revealed all. There are depths yet unsounded. Progress is the law of nature and the law of the human mind. As men continue going forward, so will their mental faculties increase. Already in some, as many as a hundred and even two hundred have been discovered; but who can tell what Physiognomy will bring to light, when the science has been brought to perfection? Who can say what number of faculties will be possessed by the human mind when the present sustains the relation to the future that the past sustains to the present? As the petals of the flower are unfolded by the light of the sun, so are men's minds wrought upon by minds greater than themselves. Truth begets truth, science begets science, faculties beget faculties;

so that the time may come when it will be seen that the powers of the human mind are as innumerable as the sands of the sea shore.

> "Curb, then, flaming dogmatists, your pious wrath;
> Canute-like, ye may sit upon the shore
> Opposing angry foam with angry froth;
> But with encroaching wave and growing roar
> It comes, your sand-placed thrones must topple o'er,
> Whelmed in the wave that but recedes to gain
> A higher leap and wider than before.
> Scold not the waves, they but obey the plain
> Resistless destiny, that rules Mind, like the main."

THE HUMAN FACULTIES, AND THE PRINCIPLES UPON WHICH THEY ARE FOUNDED.

THE word "Faculty," as is clearly shewn by its derivation, simply denotes the possession of ease or facility, in a greater or less degree, in performing actions, or in carrying out to their ultimate results a given class of propensities or proclivities. It is derived from the Latin "facultas," a substantive closely allied to the adjective "facilis," easy, and from which we have direct our English words, facile, facility, facilitate, facilitation, &c., &c. A faculty, therefore, whether regarded from a physical or mental point of view, is, as the etymology of the word plainly demonstrates, the amount of ease or facility which attends the performance of actions or thoughts, and irrespective of whether the particular faculty which may happen to be under consideration be of an inborn origin, or superinduced in whole, or in part, by cultivation. The degree of endowment between one individual and another is, as might be expected, exceedingly varied, and may almost be said to be co-extensive with the expanse of the human race itself. This variety is not, of course, confined to the element of number, though even in this limited sense the remark as to the great diversity of endowment would still hold good; and it is in the degree of strength or intensity of faculty, as developed in different individuals, that we may probably expect to find the most prominent exhibition of variation. In some individuals we find present in a greater or less degree of development, an astonishing number of different faculties. In such a case, we have the "Jack of all trades and master of none," when the great variety of faculties with which the individual is endowed or cursed is but feebly backed up in point of degree of strength or intensity; when great variety of faculties and a high degree of strength or intensity combine in harmonious action, as they very rarely do, we have as the result an "Admirable Crichton," who does everything and everything well. Every faculty appertaining to the human family is of a two-fold character --the physical and the spiritual—and these double characteristics are closely interwoven, and intertwine with each other, acting harmoniously and in unison, but without obliterating the line of demarcation which exists between them. The vast variety in the degree of endowment, and the phenomena of the spiritual existing in excess of the physical, and *vice versa*, are clearly traceable to, and the results are directly deducible from, the preponderance of one set of elements over another set in the human bodily structure. As an easily understood illustration of this, we have only to examine the salient points of the human edifice, to be furnished with the following indisputable data: The Abdomen, when, relatively to the other members of the body, of large development, indicates will of self or selfishness; the Thorax, of a largeness of size in disproportion to the other members, is an indication of the excess of will of action or courage; the undue development of the Muscles is an unfailing index of the presence of the will of contrariety; the Bones, large relatively, indicates the preponderance of the will of inertia or obstinacy; while the Brain, large out of proportion to the other members, shews the presence of will of opinion, or the capacity of overpowering antagonists in intellectual warfare. The number of distinct faculties existing in the different individuals of the human race is really much larger than we would be disposed to imagine, after a cursory and superficial glance at the subject. Many of them are particularized in the Physiognomical books which we have already given to the public; but these publications have by no means exhausted the list. Amongst numerous others not commented upon in the works referred to, we may here mention the human faculties of walking, swimming, skating, horsemanship, labour, clothing, marriage, morality, metaphysics, common sense, consciousness, mediumship, intelligence, instinct, conception, judgment, archness, intention, psychology, idealism, clairvoyance, comprehension, intellection, apprehension, and intelligensitiveness. The list might still be extended very considerably, but those given will suffice to give the reader some conception of the comprehensiveness of the subject. The physiological explanation of the causes and effects which we have attempted to illustrate, in reference to the relative preponderance of the five varieties of faculties which advance themselves most prominently, is not very far to seek. The Abdomen, when relatively large, denotes the presence of a selfish will, in virtue of the grasping and craving nature of that part of the body, and of the juices which are engendered and secreted there. These urgently demand primary attention, and they will countenance no consideration for the wants of any of their brother functionaries, until their own demands have been conceded to the uttermost. This granted, they acquiesce actively, as well as passively, in the conveyance to its various destinations of the support which is necessary for the existence of the other members of the human functional body. This is the very essence of selfishness. The selfish individual is not averse to the contemplation of contentment and enjoyment in others, and he will even contribute to bring about this result; but with the inevitable proviso that he must first be served, or serve himself to repletion. When relatively large, the Thorax, which is mainly made up of the heart and lungs, is indicative of the will of action or courage largely developed, because these parts of the human frame exhibit, during every second of the existence of life, an unceasing and incessant activity. Here we find the grand principle of action displayed to its fullest extent; and not a moment of our life but the heart beats and the lungs dilate with dauntless, unwearied, and unceasing regularity and fidelity. The less sensitive and less active of the human functions may sink to rest their wearied faculties, secure in the assurance that the heart and lungs will courageously and unweariedly carry on the needful action, and maintain the heat necessary for the welfare of the body corporate. When, therefore, the proportions of the Thorax are large, we may be sure the mental part of the individual is richly endowed with motion, activity, or courage. The uninitiated may not be aware to how large an extent the principle of contrariety pervades the functionary arrangement of the muscles. It would seem as if it were the very nature of the muscles of the human frame to act contrary or in opposition to other muscles forming part of the same bodily structure. If we examine the Muscular arrangement of one of our hands, we find that its action is the reverse of the arrangement on the other hand, to which it acts in direct contrariety thereby demonstrating the existence of a two-fold power of action. When a volume of air is received into the lungs, it instantly enlarges the thoracic part of the body; but immediately the principle of contrariety, which we are now noticing, displays itself in the elasticity of the pulmonary cells and abdominal muscles, which, by a contrary motion, at once expel the air that has just been admitted. When the heart receives blood, it is extended and dilated;

but instantly the various layers of muscles which form its walls, acting with what we may be pardoned for calling instinctive contrariety, put themselves in action, and drive out the blood which has been received. This principle of contrariety pervades the entire Muscular arrangement of the human frame; and where we find in the individual a Muscular development in excess of the other bodily functions, we may be sure of the presence of the will of contrariety, or, in other words, the presence of an easiness, facility, or faculty of going and doing contrary, and of working to cross purposes. This is the pig character, and the human variety will be found built broad and low like his porcine brother. When Bones predominate in the individual human structure, the ruling principle. of the individual will be found to be obstinacy. The quality of obstinacy, when dissected and examined, will be found to be simply a disinclination to move; a predisposition to inertia, such as the ass, which may be regarded as obstinacy itself on four legs, and endowed with life, displays with so frequent a recurrence. The ass has a large Bone development, and it is mainly due to this peculiarity that it has acquired so unenviable a notoriety for obstinacy. The component parts of bone are largely made up of lime, phosphates, and other rocky material. Now, this rocky substance, which enters so largely into the composition of bone, is inert matter, which is moved with difficulty, and never in consequence of any action from within. When this tendency to inertia or obstinacy is individualized by a predominance of bone, the individual has, as the most prominent feature of his character, a distaste to motion, an inertia, obstinacy, in fact. The last spiritual manifestation deducible from an excess of development in the five salient features of the human frame is what we have termed "will of opinion," traceable back to predominance of brain, and which may, in other words, be described as a "positive or vivid power of sensation." When the idea of a material form is conveyed to the brain, through the medium of the material eye; or when an abstract or immaterial entity is looked at and examined by the eye of the mind, an impression is made upon the nervous system; these impressions become mentally solidified into convictions, and the individual forms positive conclusions respecting the object, whether material or abstract. The conclusions arrived at in this way are, in common parlance, his opinions, and his capacity for forming and retaining opinions will be in proportion to the size relatively of his brain. Man's endowment in this respect leaves even the most advanced of the rest of the animal world far behind; and this fact is directly deducible from the size, relatively, of his brain. This will of opinion, where inordinately developed, has led to the sacrifice of millions of human lives, for causes spiritual, intellectual, commercial, political, and polemical. We hope we have made it plain to our readers to how great an extent the two phases of each of the five particularized faculties depend on, and are regulated by, each other. All the other faculties maintain a parallel attitude, and hinge equally with those we have detailed on the predominance of one part of the human edifice over another; and it is in a proper understanding of this comparative structure that the key is to be found to the phenomena and mystery of the human character.

As we have, we hope, shewn that, in special and prominent cases, the faculties appertaining to humanity are dependent for their existence on their various material prototypes resident in the bodily structure, so may the rule be accepted as universally applicable in general and less prominent cases. All faculties, however subtle and complex their composition, are dependent for their existence and support on particular elements, forming constituent parts of the material structure of the bodily frame. The faculties have no patent of self-existence; and continued and adequate support is absolutely necessary to their living and healthful action. If this support be vitiated at its springs, or totally withdrawn, the faculty becomes unhealthy in its action, and finally ceases to exist. According to the character of the faculty, support is sought from the various members of the material body, the spiritual character of the faculty bearing a close resemblance to the characteristics of the region from which it draws its supplies. As an illustrative example, the faculty of appetite, or appetitiveness, has for the object of its existence the furnishing and regulation of the supplies of food necessary for the keeping alive of the body; and accordingly, as the Abdomen first assimilates and then regulates in the interior the distribution of the requisite aliment demanded by the other organs, so is it the prototype or sign of the supplyant faculties, of which that of appetentiveness is one. A parallel case is that of aquasorbitiveness, or that faculty which regulates the reception of liquids into the human system. The admission of a stipulated supply of liquids is equally necessary with the supply of solids for the due nourishment and support of the frame; and therefore, as the Abdomen or stomach is the internal assimilator and distributor of nourishment, the faculty of aquasorbitiveness looks to the Abdomen or stomach for its guidance, and for the degree of vigour and judgment which may be necessary for the proper performance of its functions. When the Abdomen is distended with easy repletion, a calm contentedness and acquiesciveness supervenes; this placidity is immediately communicated to the faculties of appetitiveness and aquasorbitiveness, and for the time being a peaceful harmony reigns supreme throughout the entire range of the supplyant powers. Animalimitationality is the faculty which enables one individual of the animal creation to copy or imitate the actions and motions of another. In the human variety the very first exhibition which we have of animalimitationality is in the lately born infant teaching itself, or being taught by example, the motions and actions necessary for the admission of nourishment; and therefore animalimitationality will come under the natural law in belonging to that part wherein the faculty is first brought into use, which, in the instance on which we are now engaged, is in and around the mouth, and in immediate combination and connection with the supplyant powers. The mouth and its immediate surroundings, in virtue of the great mobility or power of motion which is seated there, is eminently adapted for producing imitations of animal actions, and the facial power of expression seems here to reach its acme, culminating in a wonderful range of power in the direction of animalimitationality. The conditions reigning in and around the mouth also are faithfully indicative of the conditions which subsist in and around its prototype of the interior, the Abdomen; and it is closely allied to, and conscientiously illustrative of, the whole of the signs connected with the supplyant powers. The mouth is, moreover, the commencement of the alimentary canal, with the entire course of which it must correspond, relatively, in point of size and conditions. It is not, therefore, difficult to see to what a large extent the mouth and its concomitants form an index of the size of the abdomen, or how its width corresponds to the strength of the faculty of animalimitationality and its fulness, or the extent to which it reaches forward to its activity. This law of necessity and convenience, as illustrated in the harmonious regulations of the supplyant powers, as well as in those of the other classes, offers a tempting opportunity for an incisive examination and elucidation of the springs of action whence those beautiful arrangements have their origin; but as this is not an essay on the principles of the signs of the faculties and powers of man, we must leave that phase to be dealt with by the student of natural law. A curious law operating in connection with the human faculties is, that it is not within the power of any individual to do or perform anything which does not already exist and reside within his organization. When a man finds himself unsuited for any particular calling or occupation, his incapacity proceeds purely from the non-existence of the thing within him; and there is therefore a very considerable amount of truth and aptness in the expression, rashly set down by many as slangy and indecorous, "it is not in him to do it." The simple fact is, that we cannot do, or judge of, outside of ourselves, what we do not already possess within our systems. A man need not attempt to become a carpenter or architect, or to build a house, if he is not himself constructed on the mechanical principle. If he does not possess the faculty of structurodexterity, that is to say, if he is not himself built upon the mechanical principle, with square form, and provided with large bones, he will be quite unable to distinguish himself in dealing with square objects, or things with angles and straight lines, and he would fail utterly in any attempt to expend his energy in an architectural or mechanical direction. To afford a prospect of success in this quarter, the beginner must already possess the elements of the art within him, and be constructed on the principles we have mentioned. If so endowed and possessed of the requisite Muscular strength, he will find no difficulty in acquiring, by the necessary amount of practice, an easiness, a facility, or faculty of performing and judging of mechanical work. Again, to enable a man to do and judge of round work, it is necessary that he should be himself built on the round plan of human architecture. It would be futile, for instance, to set an individual to learn the art of watch and clock making, if he were wanting or deficient in the corporeal elements of motion, roundness, stability, and mechanism. The result would inevitably be a signal failure, arising from having disregarded the fitness of things, and the universal law of the relations subsisting between the functions or faculties, as such, and those portions of the human structure on which they are severally dependent for existence and support. One man is abundantly endowed in the matter of colour, and he becomes, or would become, if circumstances led him to make the attempt, a great painter. Another man has only one colour in his form, and thousands of pounds might be spent in vain in trying to teach him to paint. The thing itself does not exist within him; and it were as reasonable to attempt the manufacture of something out of nothing, as to endeavour to supply, by artificial means, that wealth of colour which nature has denied him. The same principle applies with equal force throughout the entire scope of the subject, and in every case deals equally powerfully with all the human faculties, whether in their spiritual or physical phases. A man cannot regard money from the miser's point of view, unless there is within him a preponderance of the material over the spiritual. A would-be painter cannot picture on the canvas what he is unable to originate and conceive within his own mind. It would be worse than idle or unreasonable to expect a song from a man who had no music in his soul. You might as well hope to get five hundred dollars from one who did not possess a cent,—to get a dove to carry the load of an ox,—or a spider to spin a web of sufficient strength to arrest the rapid motion of a train of cars! These latter expectations everyone will readily admit to be in the highest degree absurd; and yet they are not one whit more absurd than to hope to attain to usefulness—not to speak of eminence—in any particular walk of life, if the candidate does not exhibit in his bodily conformation that particular fitness and aptitude which, by the eternal law of nature, governs the particular faculty which is in question.

The faculty of demolitiousness is the presence of a proneness, a facility, or faculty for destruction. To have the power to bring about wreck and destruction, strength is absolutely necessary, and this strength is only obtainable in a large development of the Muscular system. Large muscular development, perforce entails width of body, and wherever we find exhibited an unusual width or breadth of bodily structure, we may accept that as excellent *prima facie* evidence of the existence in the individual of a powerful development of the faculty or principle of physical destructiveness. And as a corollary of this, wherever we find the head narrow, and long from front to back, that is to say, in its anterior and posterior diameter, accompanied by wide shoulders, and a prominent and rather thin nose, we may take it for granted that we have before us an example of the embodiment of spiritual destructiveness, by which we mean, a facility or faculty for the demolition of erroneous and mischievous ideas. This is the description of great reformers of thoughts and morals. When we find an unusually large development of the flexor muscles, we may be assured that we have discovered a safe repository for secrets; this development of the flexor muscles denoting the power of retaining possession of secrets without the least pain or exercise of self-denial. The very genius of the entire system of such a specimen is secrecy, and it delights in nothing so much as in the possession and retention of exclusive information and intelligence.

We have admitted the possibility, under certain conditions and within somewhat narrow limits, of the cultivation and partial development of faculties; but let it be borne distinctly in mind that this is possible only to the extent—and no farther—that it is practicable to modify by cultivation, use and wont, the bodily proportions. This action is very limited and circumscribed; and the influence exerted by the bodily proportions upon the faculties themselves is in exact ratio with the changes which they have first undergone. It will, however, sometimes appear as if the entire mental action were reversed, and this is explained by taking the material example of the steam-engine. A very slight exertion of power on the part of the engineer acting upon the lever or valve-handle will gradually slacken the speed of the machine, until it comes to a stand; and a further movement will cause the power of the steam to be exerted in such a way on the machinery as to engender a contrary motion, and the engine, which was before proceeding eastward, now proceeds westwards, impelled by the same power acting on the same machinery which formerly propelled the machine in an easterly direction. The organization of man is infinitely finer and more complex than that of a steam-engine, and the forces which act upon it are vastly more numerous than those of heated water and air, and it is therefore capable of an infinitely greater variety of action and motion. To strengthen the spiritual power of man, we have no other means than that of purifying his material proportions, and enlarging the sensorium or Brain and Nerve form. Gradually, and in exact proportion as his system becomes purified and etherealized, the spiritual phase of his faculties becomes improved and enriched. Let the body undergo deterioration by physical drudgeries, unwholesome food, filth, or excessive indulgence in ardent spirits, and the human engine is immediately reversed, and runs in the direction of the animal, instead of the spiritual. The operation necessary, therefore, to awaken a latent faculty, or to change the direction and aim of an existing active one, is simply that of effecting a change of the conditions of the bodily proportions. To secure the healthy and useful action of the faculties, it is necessary to have each individual faculty existing in harmony with the others;

and where this harmony is exhibited in its fullest extent, there do we find specimens of humanity constructed on the surest principles for the furtherance of their own happiness, and the amelioration of the conditions of the world at large.

THE FACULTIES, THEIR SIGNS AND PRINCIPLES.

CLASS I.

THE SUPPLYANT POWERS.

WHERE THE POWERS OF THIS CLASS ARE LARGE, THE ABDOMINAL FORM PREDOMINATES IN THAT ORGANIZATION.

◆

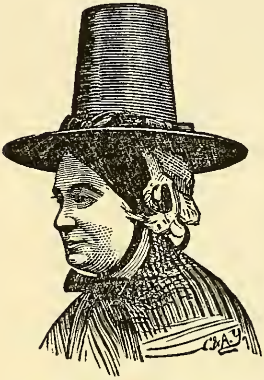
ACQUIESCIVENESS.—CONTENTMENT.

THE DISPOSITION TO BE SATISFIED IN A QUIET MANNER.

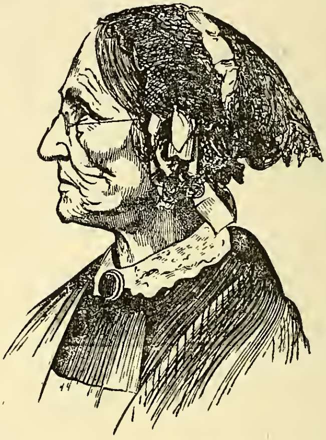
Full cheeks and placidity of countenance indicate acquiesciveness or contentment generally, especially if the aspect is cheerful.

PRINCIPLES THAT UNDERLIE THE FACULTIES AND THEIR SIGNS.

EVERYTHING that exists within the range of nature, and, whether embodying material or abstract ideas, has as a fundamental accompaniment, an underlying principle that ranks before, and in precedence of, the fact, idea, or faculty itself. In observing the fall of an apple to the ground, from the particular branch or twig whereon it has grown, the most superficial observer may recognize the fact that the apple has fallen; but under and preceding the simple fact of the apple having changed its place and position, there is the infinitely more interesting consideration of the cause or principle whence the change of place has sprung, and this underlying cause or principle we call the "natural law of gravity." But for the operation of this law of gravity, that attracts every atom of natural matter in the direction of the centre of the earth, the apple might have remained for ever in its elevation of a few feet above the surface of the earth, or it might have been left to be operated upon by other forces in any other direction. From this illustration, we perceive by a train of logical reasoning which all may comprehend, that facts, occurrences, or by whatever name we may choose to call them, are invariably preceded by natural originating principles—these facts being the natural outcome of the forces exerted by those principles, and not independent occurrences constituting cause and effect in themselves. Simply to observe facts is one thing; but to trace back from effect to cause—to sift and elucidate the underlying principles, and to unfold and explain the time and mode of action, is quite another thing, requiring a much higher order of logical reasoning power. In this article we propose, briefly and simply, to open up this feature of the question, by indicating the principles acting in precedence of each faculty or power, in the parti-



Acquiesciveness Large—
Welsh Woman.



Acquiesciveness Small—
Mrs. Bachus, of California.

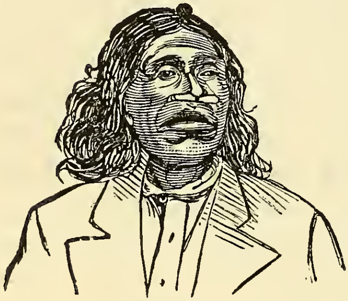
cular order in which the faculties have been arranged. The underlying principles will be placed as the last verse under each faculty, in their respective order, as in the following paragraph —

Acquiesciveness makes its presence manifest in a full development of the muscles and tissues of the cheeks, temples, &c., conclusive evidence of an abundant supply of animal juices, and consequently of the possession on the part of the individual of excellent digestive powers, and of an ample and well-working assimilative apparatus. As there is no time when what we may call bodily contentment, or the absence of any kind of craving or uneasiness is more conspicuous than immediately after a wholesome and well regulated meal, so is there no time when mental tranquillity or contentment is more fully displayed than immediately after the bodily wants have been attended to, and when the juices are actively engaged in the assimilation of the nutritious ingredients that have just been submitted to their action, for the purpose of being worked up and elaborated into invigorating life. We thus at once perceive the intimate relationship subsisting between a fulness in the cheeks, temples, &c., and the faculty of contentment or acquiesciveness—the cause being the excellence of the digestive organs, and the consequent abundant presence of the animal juices, the effect being the development of the faculty of acquiesciveness. Good digestion communicates its signs to the Physiognomy, and spreads itself throughout the entire character which the face represents.

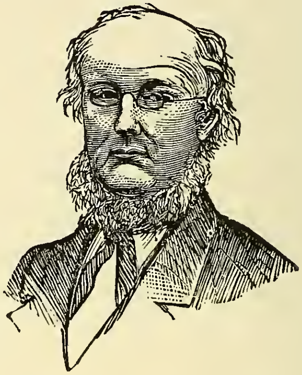
ANIMALIMITATIONALITY.—ANIMAL IMITATION.

THE POWER OF IMITATING THE MOTIONS, POSTURES, AND ACTIONS OF ANIMAL FORMS.

A wide mouth, in a narrow face, may safely be defined as indicative of Animal Imitation.



Animalimitationality Large—
A Fort Rupert Indian.



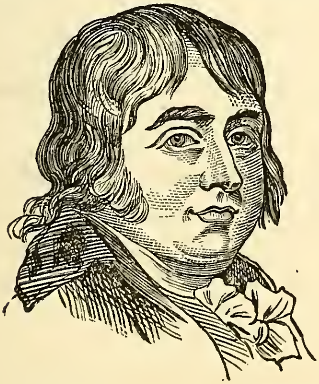
Animalimitationality Small—
Horace Greeley.

The most mobile and expressive part of the face by far is the mouth itself, and here we find the seat of powers of imitation of a character almost illimitable. In particular individuals we find occasionally an amazing capacity for imitating the sounds of man and animals, and in no specimens is this power not developed in a certain degree. These powers of imitation are seated in and around the mouth, and accordingly to this part of the Physiognomy we assign as a natural consequence the outward sign or manifestation of animalimitationality; for, if we are not to look for the sign of a particular faculty in that part where it is most manifested, how can we hope to discover it elsewhere? We measure the swallow of the whale by the dimensions of the animal's throat, and by the same process of reasoning we measure the capacity of an individual for producing imitations of the sounds given forth by his brother man and by the inferior animals, by the form and degree of mobility of that part of the face wherein resides the highest powers in this direction. The degree of development, therefore, of the faculty of animalimitationality is determined by the size of the mouth.

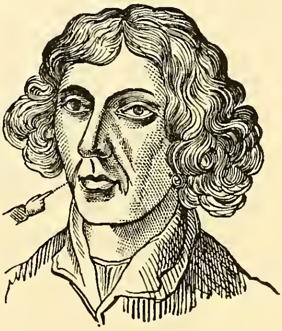
AQUASORBITIVENESS.—RELISH FOR WATER.

APPRECIATION AND LOVE OF WATER DRINKING, WATER SCENERY, BATHING, ETC.

A rounding or puffy fulness of the cheeks, from one-half to three-fourths of an inch outwards, backwards, and slightly upwards from the mouth is that part of the face where the love of liquid first manifests itself.



Aquasorbitiveness Large—George Morland, a talented painter.



Aquasorbitiveness Small—Nicholas Copernicus.

This faculty directs the quality, quantity, and frequency of the supplies of liquid that are necessary for the healthy working of the body corporate. It receives its inspiration from the condition of the juices of the stomach, and we may predicate with absolute certainty its intimate relations to these juices. Of a soft character, they would naturally operate upon the soft parts of the face, and accordingly we find the outward sign of the faculty located in the soft parts of the cheeks, and just before the masseter muscle. The faculty may become unduly developed or vitiated by immoderate drinking, as in the case of George Morland, and other intemperate people, and in proportion as this phase or disease develops itself, we find the growth and enlargement of the outward sign itself more fully manifested in the swelling out of that part of the cheeks in which it is situated. This is a development of the law of use and wont, in this case operating, and naturally so, upon that part of the face set in motion by drinking. The sign of the faculty of aquasorbitiveness is accordingly situated in the cheeks, just before the masseter muscle.

PHYSIOELPIDICITY.—PHYSICAL HOPE.

THE FACULTY OF HOPE RELATING TO THE PHYSICAL WORLD AND MATERIAL THINGS.

Full, moist eyes, plump cheeks, large neck, and an elastic springy step, can be safely relied upon as signs of physical hope. The sunken, dull eye, hollow cheek, and drooping corners of the mouth are physiognomical indications of a gloomy nature.

As this description of hope relates only to the animal or material department of wants, and is confined to the natural bodily craving for the sustenance which is necessary to the existence of life, it is natural that we should look for its signs in that part of the body which first touches and receives the bodily aliment on its way to the interior, viz., in and around the mouth and the lower part of the face.

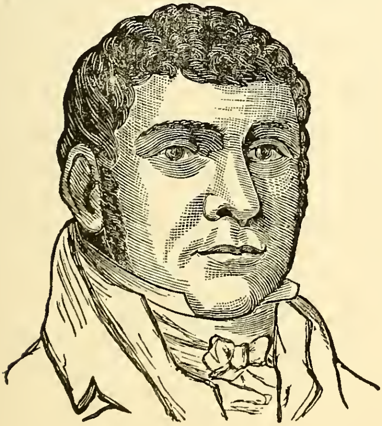
As the amount of animal hope depends entirely upon the amount of life force which is present, so would we naturally look for the outward sign or manifestation of this faculty in that part which indicates the presence of a reserve of vitality, and we accordingly find that results bear out this chain of reasoning.

GRASPATIVENESS.—RAPACITY.

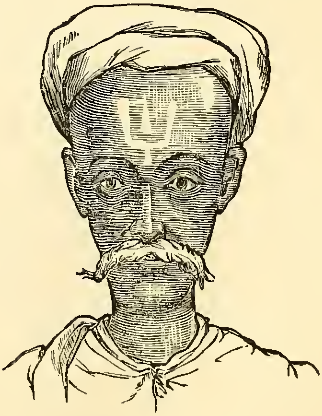
THE PROPENSITY TO GAIN BY EXTORTION, OR ADDICTION TO GAIN BY PLUNDER OR OPPRESSION.

Heavy jaws, large neck, and heavy chest, are signs of large rapacity.

The conformation of the mouth generally, but more especially of the jaws, which are the means that Nature has provided to man and to the lower animal kingdom for grasping and retaining possession of their food, denotes in



Graspativeness Large.—Robert Gregson, a notorious English pugilist.



Graspativeness Small.—Nana Narian, an East Indiaman.

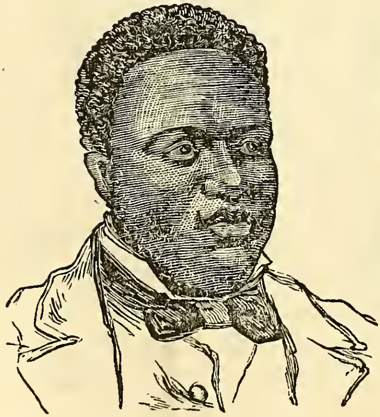
proportion to its relative development and prominence of size and position, the degree of the predatory proclivities of the individual. This graspativeness is not confined to the matter of food alone, but comprises everything within the range of human experience, on which the grasping faculty can be expended. The outward sign, therefore, resides in the mouth and jaws.

ASSOCIATIVENESS.—SOCIALITY.

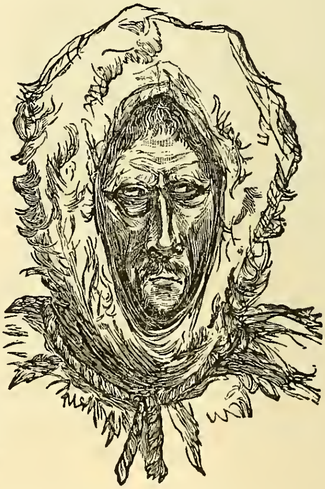
THE DESIRE TO CONVERSE WITH OTHERS AND BE IN THEIR COMPANY.

Open, protruding, red lips, full cheeks, and large abdomen, are signs of sociality.

This is a genial interchange of sympathetic thought and feeling; a magnetism and a vital force which spring up in



Associativeness Large.—Samuel R. Ward, a Negro remarkable for his social disposition.



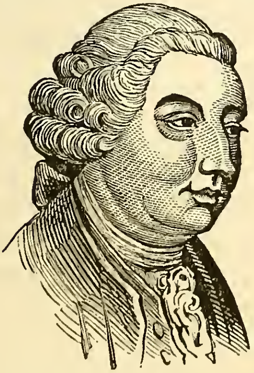
Associativeness Small.—David Duncan, a Hermit of Michigan.

human intercourse, and warm up into full action before the extracting influence of appropriate and loveable companionship. To be capable of a full display of this genial effervescence, the individual must be well and fully endowed in the matter of vital force. His living action must be in the enjoyment of the fullest and the freest play; his animal juices must be abundant, and the whole machine must be throbbing in the exuberance of overflowing life and action. In such a subject we find the lips full and protruding, the cheeks plump, eyes sparkling, and a warm and healthy glow overspreading the entire Physiognomy. These are infallible indications of sociativeness, being the natural outcome of the superabundance of life and energy, which is the unfailing accompaniment of a high degree of sociality.

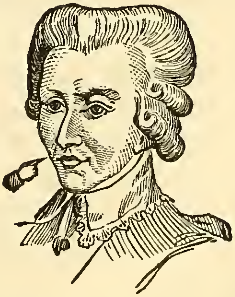
APPETITIVENESS.—DESIRE OF FOOD.

THE FACULTY OR QUALITY OF APPETITE.

Width and general fulness of the cheeks opposite the molar teeth, and a large mouth are never-failing testimonials of good sustentative propensities.



Appetitiveness Large.—David Hume, a celebrated historian.



Appetitiveness Small.—Gustavus III., King of Sweden.

This faculty shews its presence in a fulness of the cheeks opposite to the maseter muscles, and the reason of this is at once plain and evident. The maseter muscles being those used in the mastication of food, they are seldom idle for any length of time; and, by the natural law of development by use, the result is arrived at of a fulness in the face over the place where those useful and industrious workers are silently and efficiently performing their duties.

RETALIATIVENESS.—RETALIATION.

THE DISPOSITION OF RETURNING LIKE FOR LIKE.—"TIT FOR TAT."

This disposition being stronger in the dark races and animals than in the light, we conclude that persons are retaliative relatively in proportion to the depth of their colour. Another sign of revenge is a hollow in the centre of the forehead. The elephant is an example of a revengeful character; and the hippopotamus and rhinoceros are exceedingly retaliative. Horses with this deep indent in the forehead should never be trusted.

By the term Retaliativeness we are generally understood to signify the returning of evil for evil; but this meaning is by far too restricted in its comprehensiveness. It is in fact the reflection back, or reaction of any set of feelings from one individual to another; and it is quite as much to be regarded as the returning of good for good, as any less worthy motive or action. This capability of reaction or reflection is only highly developed in those who are endowed with a superabundance of the Fibrous and Muscular form, accompanied with a predominance of the Abdominal. Now the Abdominal form being largely made up of the soft or semi-fluid portions of the body, its natural tendency is to reflect back as with a shadow the impressions that come in contact with it. It is the nature of water, as well as of all other kinds of fluid, to reflect back blows or shadows, or whatever may be received on their surfaces; and this reflection or reaction becomes, when accompanied by an impelling force, the faculty of Retaliativeness; and it is thus that we account for the fact, that a man with a large development of fat is given to retaliative propensities; and when we add a large abdomen and sufficient depth of colour, we have combined in one individual all the elements that are necessary for the vigorous throwing back of all impressions, whether these impressions be good or bad, that come in contact with this form. The faculty has its sign, therefore, in a full development of the Muscular, the Fleshy, and a superabundance of the Abdominal form.

THE FACULTIES, THEIR SIGNS AND PRINCIPLES.

CLASS II.

THE PROTECTIVE ABILITIES.

IN PERSONS WHERE THIS CLASS OF ABILITIES IS RELATIVELY LARGE, THERE IS AN ASCENDANCY OF THE THORACIC FORM.

❧

SENTINELITIVENESS.—DESIRE TO BE SENTINELLED.

THE PRECAUTIOUS DISPOSITION THAT SETS ONE OR MORE ON THE WATCH, TO KEEP A SHARP LOOK-OUT, AND GIVE WARNING OF APPROACHING DANGER.

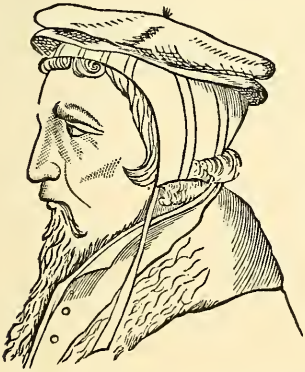
Great fulness of the forehead, immediately above, and close to the junction of a long nose with the forehead, evinces a desire to be guarded and sentinelled against danger.

THE outward signs of this faculty are to be found in the expansion of the forehead, immediately above its junction with a nose of more than the ordinary length. This indicates the degree of strength which resides in that part of the facial conformation set apart for watching over, or setting sentinels upon the safety and general welfare of the whole. It shows the amount of assistance afforded, and the degree of power accorded to the eyes, in the fulfilment of their duties of watching for, and recognizing the approach of danger. To augment the ocular power, an enlargement of the surrounding forces must take place, and this necessitates an enlargement of the bones, muscles, and brain, which are the main constituents of the surrounding and aiding forces, and it is thus we are enabled to estimate the amount of watching power or Sentinelitiveness present in the individual.

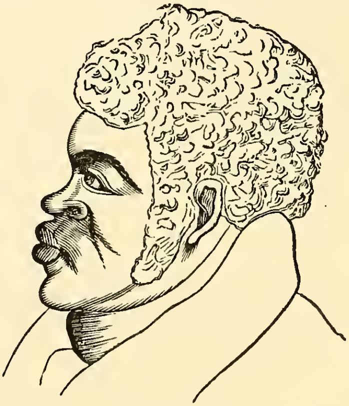
MORIVALOROSITY.—MORAL COURAGE.

THE ENDOWMENT THAT PROMPTS ITS POSSESSOR TO BE COURAGEOUS WHEN THOUGHTS REQUIRE MORAL SUPPORT.

A long prominent nose, which rises high from the face in its upper part, is the very best evidence of large moral courage.



Morivalorosity Large—Thomas Becon, formerly Professor of Divinity at Oxford.



Morivalorosity Small—Thomas Molineaux, a brutal English pugilist.

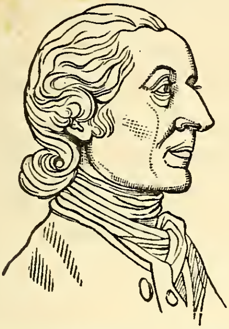
This may be described as the higher phase of mere animal courage, and it exhibits itself morally in a dauntless reaching forward for what is good and pure, and a capacity for overcoming the obstacles which may bar the way on its onward progress. Courage of the common sort is positive activity, and moral courage is the same thing, only with the addition of a high moral sense. Positive activity, as we have already demonstrated in another part of the work, resides in the thorax, of which the lungs or breathing apparatus comprise a considerable part. The thorax being the sign of positive activity, and positive activity being a high moral courage or Morivalorosity, it is clear we must look for the outward sign of the latter in the degree of expansion of the facial breathing accessories, and accordingly we find that it has its seat in the nostrils, or breathing avenues. The breathing capacity is estimated by the widening out of the nostrils, and the amount of breathing capacity indicates the degree of development of positive activity, which in its turn is the indice of the amount of moral courage or Morivalorosity. The very essence of morality is a reaching forward for what is good; and when we find the nose expansive, and reaching forward, we may conclude that the aspirations and aims of the individual are in the direction of the moral and the good.

ELEVATIVENESS.—ASPIRATION.

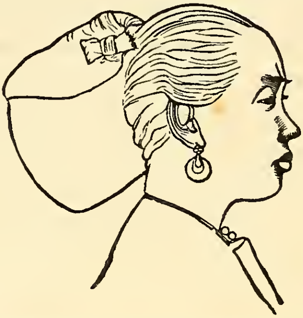
THAT QUALITY OF MIND THAT TENDS TO ELEVATE CHARACTER AS WELL AS BODY.

The nose that stands well out, and up at the point, accompanies the elevative disposition in men and animals.

The desire and capacity for that species of energetic and overcoming action that carries an individual up an acclivity has a twofold origin, and the forces which act may be termed shortly, the force of strength, and the force of direction. The working of the former has already been explained under the head of Morivalorosity, and the other is the guiding or steering element, which regulates the direction that the force of strength or activity is to take.



Elevativeness Large—Lavater.



Elevativeness Small—Chinese woman.

The direction of the character of the individual, whether that be aspiring or grovelling, is measured by the direction which is taken by the features in rising out of the plane of the face; and when the growth is outward and upward, we may assume that the proclivities are towards Elevativeness in both mind and body.

OLFACTIVENESS.—OLFACTORY.

OLFACTIVENESS IS THE SENSE OR FACULTY BY WHICH WE PERCEIVE THE QUALITIES OF SUBSTANCES BY THEIR EFFLUVIA OR EMANATIONS.

Long sharp noses invariably accompany great smelling or olfactory abilities.

We may recognize a high degree of Olfactiveness when we see a long, sharp, straight nose; and the reason of this is not difficult to discover or far to seek. This kind of nose indicates a great surface for the operation of the olfactory nerves; and in the increase of strength with length, it bears a striking resemblance to the telescope, the reaching powers of which are increased in the ratio of the increase of the length of the inner barrel surface. The longer and larger is the instrument—granting, of course, that it is otherwise constructed on the requisite scientific principles—the greater the power of reach: and in like manner with the nose—the longer and wider the nostril the greater is the olfactory surface, and the more fully developed is the faculty of Olfactiveness.

RESISTATIVENESS.—RESISTANCE.

THE QUALITY AND INCLINATION TO RESIST THE IMPULSE, PRESSURE, AND ENCROACHMENTS OF OTHERS.

The elevated nose, short neck, and scowling brow are sure indications of the faculty of resistativeness.

The lion, the tiger, the dog, and in fact the whole of the combative species, when in the act of springing upon any object that is placed in antagonism to them, whether for purpose of necessary food, or from more questionable motives, may be observed to draw back the head as into a sheath, and expand the chest with a full inspiration of air, with the instinctive object of contributing greater force to the impending blow. These acts unquestionably add greater power to the aggressive force which is about to be exercised; but that which would augment the power of aggression would equally lend force for resistance; and we therefore recognize in the short neck and scowling brow, displaying to the utmost the muscular action of that part of the body, the indication of a high degree of Resistativeness, and we might safely predicate a uniform muscular condition reigning throughout the entire body.

ASSAULTATIVENESS.—ASSAULT.

THE DISPOSITION TO ATTACK THE RIGHTS OR PERSON OF ANOTHER.

The nose that stands out far from the face, in the region of the bridge or its centre, can safely be regarded as a certain sign of an AGGRESSIVE NATURE.

The vicious, biting, and kicking horse is almost invariably found to possess a nose of the bow shape, and with no very remote resemblance to that build of the human variety that we designate the commanding nose. This peculiar conformation of the nasal organ is the natural result of the conformation within, which is the cause of the animal being cursed with a vicious or assaultative disposition. The same rule holds good in the human family; and it will invariably be found that a man's Assaultativeness can be measured by the degree of tendency which his nose evinces towards the form we have indicated.

WATCHFULNESS.

THE STATE OR QUALITY OF BEING WAKEFUL.

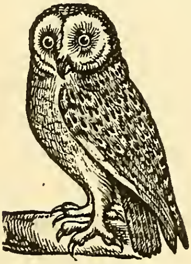
Anxious expression, uneasy manner, with full eyes and a rather long nose, strongly indicate this idiosyncrasy.

Earnest and sustained watching quickly produces an anxious and careworn expression of countenance, this being the direct, inevitable, and natural result of the action of a watchful and vigilant mind upon the outward lineaments of the entire bodily structure, and we may take it for granted that most of the bodily signs are the outcome of the working of the mind inside.

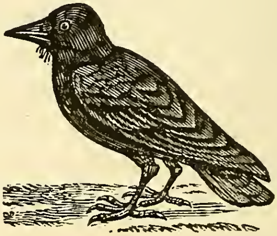
SUSPICIOUSNESS.

THE DISPOSITION TO IMAGINE AND SUSPECT THE EXISTENCE OF SOMETHING WITHOUT PROOF.

The visible evidence of suspicion is the length from the face, directly forward, to the point of the nose. The crow is one of the best examples of suspicion.



Suspiciousness Small—Owl.



Suspiciousness Large—Crow.

The altitude or protuberance that any individual or animal assumes for the head and the forepart of the body, when they are apprehensive of the approach of any kind of danger, is a throwing forward in an advancing direction of the centre of the face, as if to carry that part of the body in which reside the active and watchful faculties—that is, those lying in and around the eyes and nose—as near as possible to the place from which the suspected danger is expected to proceed. This instinctive action is born of the desire for the greatest possible facility for surveying, recognizing, and guarding against the dreaded hostility.

LOCOMOTIVITY.

THE DESIRE FOR ACTION, AND ABILITY OF CHANGING PLACE, WHILE PRESERVING IDENTITY.

The faculty of locomotion manifests itself physiognomically by a long and thin nose. The greyhound and staghound are fine examples of locomotive construction; while the sloth's nose indicates the opposite extreme, and the fact is verified by its motion being only a few feet each day.

The long slim form of animals is accompanied invariably with great speed of motion, and *vice versa* in the case of the short thick form. Take the ravenous pike, for instance —the fresh water shark, as he is called, and not without justice. His great length enables him to dart through the aqueous element with inconceivable speed. There is not, indeed, any animal whatever, constructed on the long form, that is not also endowed with swiftness; and by the same rule, all those built on the short and thick plan are slow of foot and sluggish in motion. The great length of the long animal gives a great extent for the action of the muscular power, and a proportionally long distance for the nerve fluid to act, and the result, as a natural consequence, is excess of activity. This lengthy distribution of the motary nerves enables the animal to exert its will suddenly and at once on a great expanse of surface, and to give birth at will to great efforts of locomotion.

INQUISITIVENESS.

THE ABILITY TO FIND OR OBTAIN INFORMATION—THE QUALITY OF A DETECTIVE.

A long prominent nose and thin cheeks are evidences of an inquiring disposition.

When the face assumes a wedged appearance, sharpening out into a long protruding nose, we may with safety conclude that the delight of the possessor is to pry into, and minutely investigate matters that, to others of a different form, would appear trivial and childish, and that especially the individual with the round face, or possessing the round form, would pass by without arousing or wasting a thought. This is the natural consequence of the unalterable law of outward manifestation; and it would be idle to look for traits of character in antagonism to the natural constructive bent of the individual. The thin-faced, long-nosed man revels in close inquiry, while his short-nosed and round-faced brother rolls contentedly through life, uncaring for what does not concern himself.

AMBITIOUSNESS.

THE DESIRE OF DISTINCTION OR PRE-EMINENCE.

Thoroughly defined and well-marked features are nature's recorded evidences of a keen aim in life, and wide, grasping, and far-reaching AMBITION.

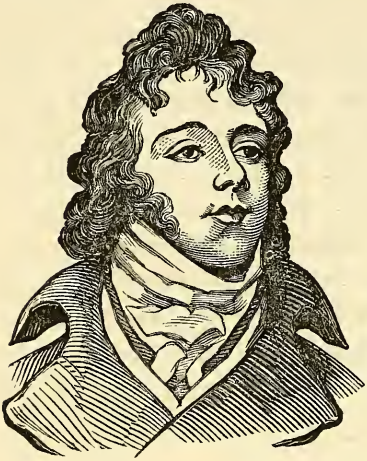
All the individual members of the human family seek assiduously after that for which, by reason of the particularity of their structure, they have the most proclivities. Those who are ambitious of the possession and exercise of power are so in virtue of being built upon the plan of power. Such a man as Napoleon the Great, for instance, was eminently furnished with those peculiarities of internal structure, that have for their outcome an unquenchable thirst for dominion and sway over their brethren of mankind. The evidence of a powerful ambitious mind is to be found in features of the coarse, strong, and well-defined character, joined with heavy jaws, large neck and chest. Features of this description are the natural indications of the presence of a large development of Ambitiousness, or the love of power, because they denote outwardly the inward power of the man, and power, like everything else in nature, has a tendency to assert itself and leave its mark.

AUTOHEGEMONY.—SELF-ESTIMATION.

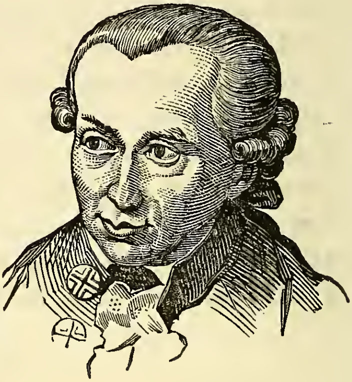
THE FACULTY WHICH GIVES A HIGH ESTIMATE OF ONE'S OWN ACTIONS OR CAPACITIES.

Carrying the head well back, and relatively great length from the point of the nose to the lower part of the chin, are indications which belong only to those who fully appreciate their own merits, and in many instances overrate themselves. Beau Brummel, the fop in the reign of George IV. of England, was intensely egotistical. Hence we have given his likeness as an illustration of large or exaggerated self-appreciation. Immanuel Kant, the eminent German philosopher, was very deficient in self-appreciation.

A high appreciation of one's-self is exhibited in the action of the mind upon the body in such a way as to draw back within itself, like a hedgehog, the whole of the Muscular system. The natural tendency of the mental part of man is to influence the body in the direction of the thing or series of things upon which the most of the love of the individual is lavished; and in this case, as the most dearly cherished being is the individual himself, the natural bent of the whole structure of the body is inwards and towards himself. A specimen highly endowed in this direction would display the trapezius muscle in the back of the neck, situated as if dragging the head backwards and upwards. This action would have the effect of lifting up the chin; and as the direction of the force exercised by the depressor muscles is of a downward character, there would naturally result a lengthening out of the face from the nose to the point of the chin. The actual momentary force exerted by the muscle is certainly slight, and might be set aside by unreflective investigators as comparatively unimportant; but when it is remembered that this force



Autohegemony Large—Beau Brummel, a noted fop and courtier of Geo. IV.



Autohegemony Small-Immanuel Kant, a German Metaphysician and Philosopher.

is being constantly exerted during the slow elapse of the years of a lifetime, we are compelled to concede to it an importance of no ordinary kind; and we must admit that no inconsiderable change would be wrought upon the Physiognomy by the silent but unceasing working that has been indicated.

THE FACULTIES, THEIR SIGNS AND PRINCIPLES.

CLASS III.

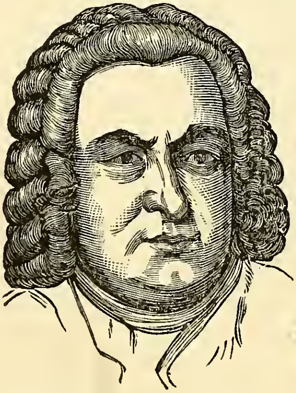
THE PROPAGATIVE INCLINATIONS.

THIS CLASS OF INCLINATIONS WILL BE FOUND LARGE WHEN THE MUSCULAR AND FIBROUS FORM PREDOMINATES.

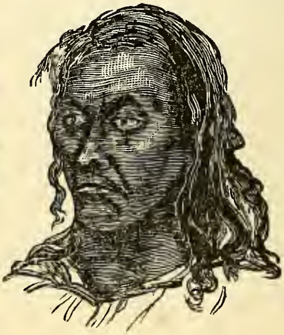
TEMPORINATURALITIVENESS.—APPRECIATION OF NATURAL MOTION.

THE POWER OF JUDGING OR COMPREHENDING THE TIME OF THE YEAR, THE SEASONS, OR THE REVOLUTIONS OF THE PLANETS.

The round form of the face and physique bespeak for the individual the ability to comprehend and produce natural time.



Temporinaturalitiveness Large—
Bach.



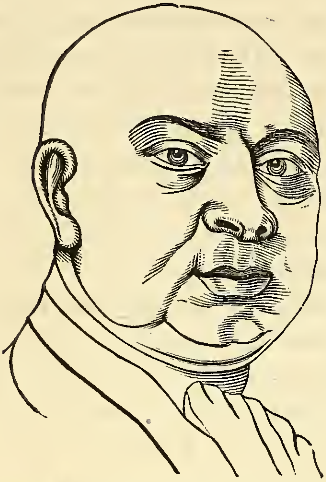
Temporinaturalitiveness Small—
An Indian of Callam Bay.

THOSE mysterious orbs of heaven, that keep their unceasing journey around their respective systems of suns in a multiplicity of universes, dazzling and bewildering to sublunary contemplation, afford us an apt and conclusive illustration in the elucidation of our science. Those planets comprising the members of our own system, and with which we have a more intimate acquaintance, such as the Moon, Saturn, Neptune, Pallas, and the rest, are all constructed on the round form, and all their motions are in circles more or less precise. They are essentially round in their conformations, and in the actions which they perform there is the unvarying principle of time which, if we may be allowed the expression, seems to be the paramount consideration, and one to which all others are secondary and subservient. This principle of the exact measurement of time, conjoined to rotundity of form and motion, give us the key to the fact, that humanity built on the round form is more adapted to the judging of anything in which time is an element, than are individuals of the other types. There is a beautiful harmony of design reigning throughout the entire domain of nature, and this is only one of the innumerable illustrations which present themselves to the intelligent observer.

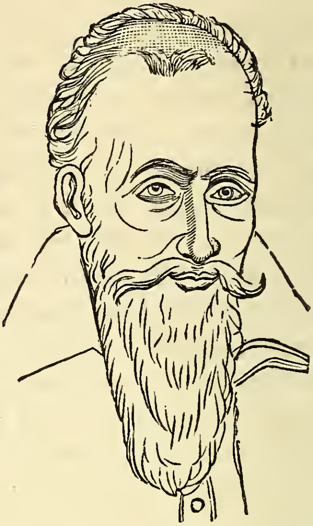
PHYSIOVALOROSITY.—PHYSICAL COURAGE.

MATERIAL AND CORPOREAL COURAGE; RESISTANCE TO EVERY SPECIES OF PHYSICAL FORCE.

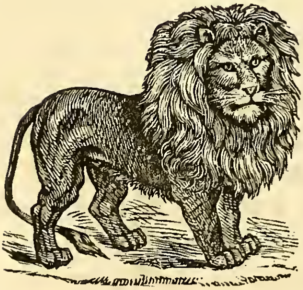
The wide nostril, short neck, large thorax, and eyes set directly in front, instead of outside of the head, are indubitable indications of physical courage; while timidity is physiognomically recognizable by a long slim neck; large eyes set on the sides of the head rather than in front; and narrow long ears. The rabbit and giraffe are fine examples of timidity.



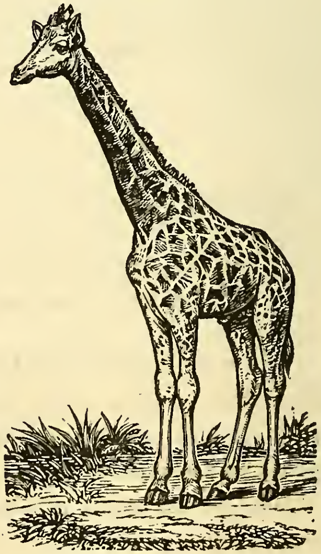
Physiovalorosity Large—John Broughton, a base pugilist of England.



Physiovalorosity Small—Joseph Justus Scalliger, who filled the Chair of Belles Lettres in the University of Leyden.



Physiovalorosity Large—A Lion.



Physiovalorosity Small—A Giraffe, taken from life in the Zoological Gardens of London.

As physical courage is the direct result of large lung development, giving rise to a superabundance of the active forces of life, and as this form is invariably accompanied outwardly by nostrils expanding at their base, we find that the presence of physical strength, which is the natural result of these conjunctions, denotes also width of head, nose, jaws, and neck, along with depth of chest, the immediate causes of the widening out of the nostrils, which we have referred to. In the above cuts of Physiovalorosity large, there may be found an excellent illustration of the operation of this law.

SOPHISTICALNESS.

THE INCLINATION TO BE FALLACIOUSLY SUBTLE AND UNSOUND.

Sophistry shadows itself forth on the facial lineaments by giving them a smooth and round expression.

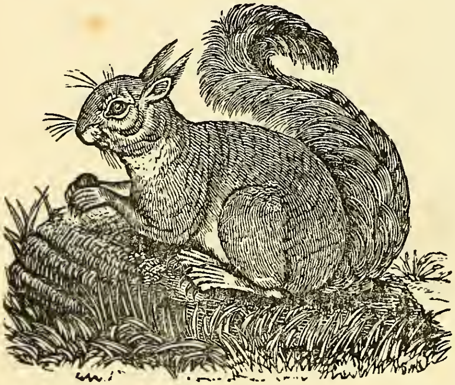
Sophistry—that consists of a false and misleading, though fair, promising, and specious style of reasoning—is the natural outcome of a round, smooth, oily organization, adapted for rounding corners, wheeling and turning, and generally endeavouring to avoid coming to the point. The man of the straight or rough form is perforce compelled to perform all his actions in a straightforward manner, and to him falsity and deceit are foreign and uncongenial. These two kinds take as naturally to their respective modes of action as the young duckling, on breaking from the shell, takes to the water. The inborn nature asserts itself: and "what is bred in the bone cannot come out of the flesh," as the old proverb hath it.

PLAYFULNESS.

THE ABILITY THAT GIVES, APPRECIATES, AND ENJOYS LIVELY RECREATIONS AND EXERCISES FOR THE SAKE OF AMUSEMENT.

Fulness in the centre of the forehead, face, and every bone of the whole frame, indicates a playful nature.

A small Osseous construction, combined with a large Muscular development, give this peculiarity to the bones, that they are most attenuated towards their extremities and attain their greatest fulness half way between those points. The natural tendency of the muscles is one of action, which action, when it is superabundant and overflowing, becomes playfulness, and consequently, in accordance with the above peculiarity, when we find the frontal bone, or indeed any other bone in the body, attaining its greatest fulness in its centre, we predicate the predominance of muscular activity, which predominance is the index of proclivities of a sportive or playful character.



Playfulness Large—A Squirrel.

INTERMUTATIVENESS.—SUBSTITUTION.

THE CAPACITY OF CHANGING OR PLACING ONE THING IN LIEU OF ANOTHER.

Intermutativeness, which is the ability to put one thing or person in the place of another, may be discovered by a general fulness in the centre of the face, from the hair to the centre of the chin inclusive.

This faculty is manifested in a general fulness extending perpendicularly along the entire length of the face. This fulness denotes activity on the part of the muscular forces, and these forces subjected to the will are the conditions requisite for producing the tendency to Intermutativeness. Fulness along the centre line of the face is always indicative of activity, while width of face or body shews the presence of mere strength rather than great activity.

PHILOMONOTOPICALNESS.—LOCATIVE HABITS.

THE AFFECTION FOR ONE PLACE, OR, HABIT OF BECOMING ATTACHED TO ONE SITUATION OR LOCALITY.

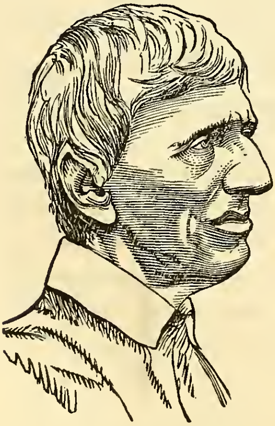
Vertical wrinkles in the forehead above the nose, and no oblique curved wrinkles starting near the top of the nose, or in the above wrinkles and curving outwards and upwards over each eye, with full round cheeks indicate that you may feel assured that such individuals are inclined to have a home, with the desire to remain in it, if possible.

Locative habits have their origin in the protracted continuance of a settled and uneventful life, combined with the action of two faculties. Consecutiveness large renders the possessor averse to change of any kind, and this form is always marked by vertical wrinkles above the nose, and the other conducive faculty, Acquiesciveness, superadds a mental condition of perfect contentment. The former especially bars the way to any desire for change of place; the latter gives tranquil contentment with the existing state of things, while continued habit ultimately welds the whole into settled and unalterable disposition and inclination.

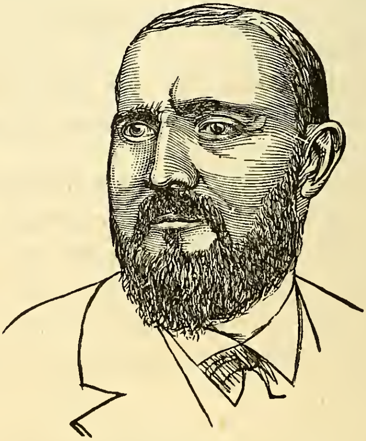
TONIRECEPTIONALITY.—RECEPTION OF TONE.

THE ABILITY OF RECEIVING AND APPRECIATING TONE, OR SOUND.

The round ear which stands well forward and outward from the head is well adapted to catch the fine or coarse sounds, and convey the wave motions to the tympanum of the ear, and especially musical sounds. An ear lying flat on the side of the head, or angular or pointed in form, is not adapted to receive and judge musical tones.

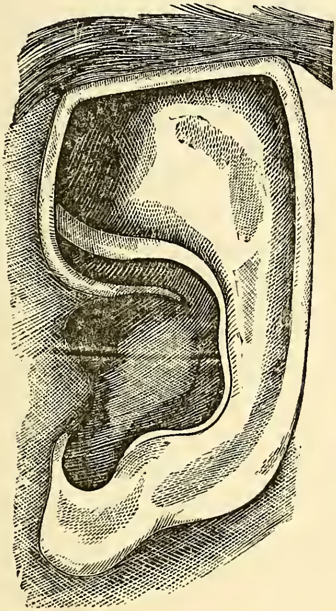


Tonireceptionality Small—
J H. Newman, D.D.

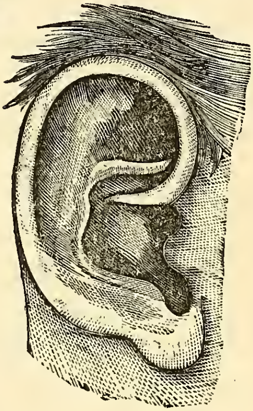


Tonireceptionality Large—
Tamberlik.

The only medium through which musical tones can possibly reach the interior and lend their soothing, cheerful, or hilarious effects to the nerves of the brain, is that of the ear, and it is natural that the contour of this member should afford some unmistakable outward indications of the capacity of the individual for the appreciation and enjoyment of music. This faculty of appreciation and enjoyment consists in its power of collecting and conveying to the auditory nerve by the drum, the sonorous atmospheric vibrations of which music is made up, and in accordance with the degree of resemblance subsisting between the form of the ear and the round curving form of music, the individual is endowed with, or deficient in, this power of appreciation. The sound of music is essentially round and rolling. There can be no doubt of this. Other



Tonireceptionality Small—
The unmusical ear.



Tonireceptionality Large—
The ear of Adelina Patti.

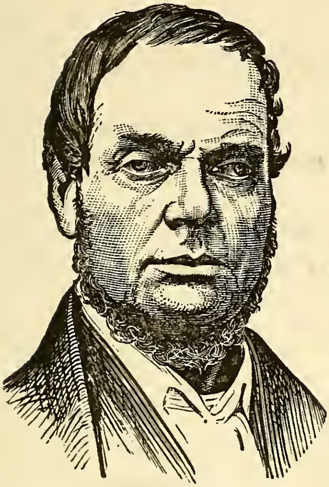
kinds of noises are square, angular, rough, uneven, or of no describable form at all; but musical tones are certainly round or wavy, and ears constructed on the round and wavy form are certainly better adapted for the reception and appreciation of music than those of the square or irregular type.

CONCEALATIVENESS.—SECRECY.

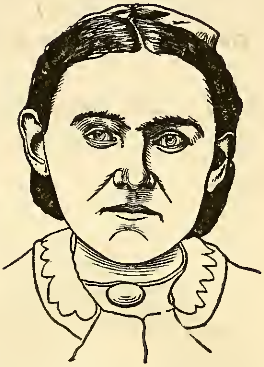
THE INCLINATION TO HIDE OR WITHHOLD THE KNOWLEDGE OF THINGS OR THOUGHTS; THE INSTINCT NOT TO TELL THE MOUSE THAT THE CAT IS WATCHING UNTIL THE MOUSE IS CAUGHT.

Secretiveness may be known by thin closely compressed lips, hollowed and flexed hands, arched or cat-shaped foot, closing of the eyes, &c. The principle of this faculty is to hold on, its action affects all the flexor muscles of the organization. It may be seen largely developed in the feline species with the round face, and small in the goose or ox-foot. Flat feet are indicative of small secretiveness. Other signs of this faculty there are—such as archness of look, and a peculiar shy and side-long glance of the eyes.

To conceal is to hide and put away for the purpose of retaining it, any object or thought, and individuals with strong proclivities in this direction, will be found to possess great action in the flexor or closing muscles of the organization. When these muscles have an excess of development the entire system will be formed on the plan of concealment; and in this, as in all other cases, the actions of the individual are simply in accordance with the nature of his bodily structure.



Concealativeness Small—Mr. E. F. Simms, Father of the Author of this book.



Concealativeness Large — Miss Stuart, of Portland, Oregon.

ECONOMOSITY.—ECONOMY.

THE FACULTY OF ECONOMICAL MANAGEMENT.

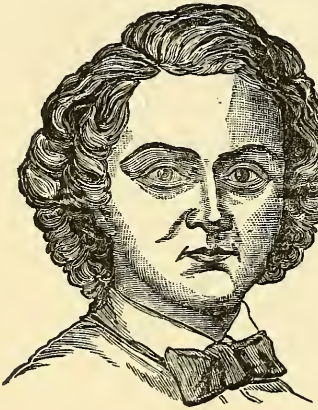
The broad, square, full face, like Franklin's, is the physiognomical premonstration of economy.

The inclination to frugal and economical management of affairs is found to be associated with a broad or square face, and is the result of the presence of a broad and sound judgment reflecting itself in the conformation of the face, as well as in a careful and judicious behaviour; the ever recurring feature of the spirit acting through, and leaving its impress upon, the Physiognomy.

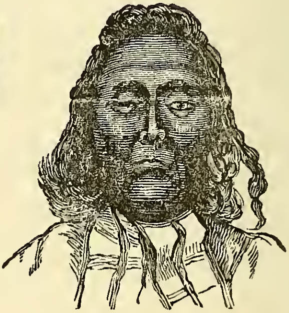
CURVATIVENESS.—JUDGMENT OF CURVES.

THE CAPACITY OF BEING ABLE TO APPRECIATE AND JUDGE OF THE BEAUTIES AND QUALITIES OF CURVES.

Relative width between the eyes, rounding face, limbs, ears, nose, and head, are indications of the faculty of curvature.



Curvativeness Large—Miss Harriet C. Hosmer, the famous Sculptress.



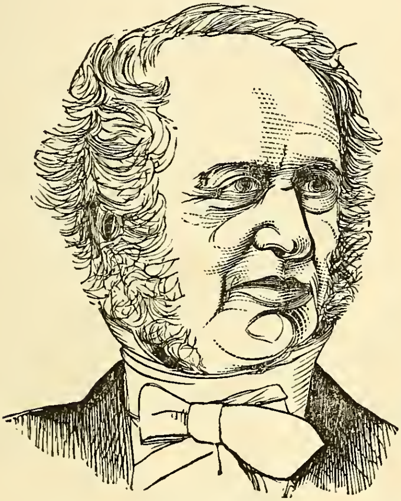
Curvativeness Small—Jim, a Piute Indian of Utah Ter.

When an individual is formed upon the curved or circular plan, it will always be found that he is possessed of great aptitude for remembering and noting the curves and turns of rivers, roads, &c., as well as a capability of judging of them accurately, and with precision. The curved principle being inherent in his framework, he can do and judge outside of himself the same kind of work which goes to make up the structure within.

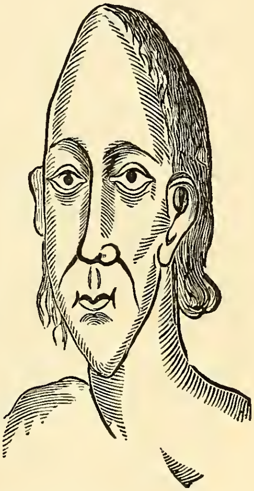
ACCUMULATIVENESS.—DESIRE OF POSSESSION.

THE INTUITIVE TENDENCY OR DISPOSITION TO ACQUIRE.

Whenever the face is rather broad in the centre, and rather long, with a prominent nose, the individual will have the capacity, if well used, to accumulate.



Accumulativeness Large—
Commodore Vanderbilt.



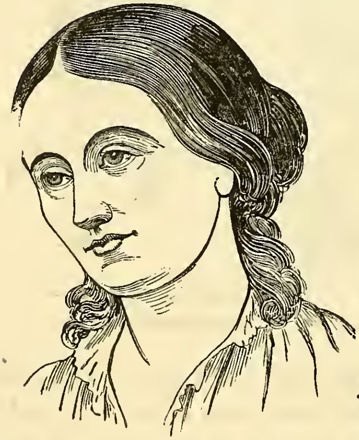
Accumulativeness Small—
A squanderer.

The natural law which manifests itself in the attraction that one kind of mineral has for an atom of another kind is every whit as active within the human organization as it is anywhere throughout the range of the universe. The individual into whose construction there enters a large proportion of earthy or mineral matter, is, as a matter of course, an amasser of riches; and where the proportion is abnormal to a large degree, we have the miser, who hoards up his gold, not for the love of anything that gold may purchase, but for the undisguised purpose of gloating over it, and feasting his eyes with it. On the other hand, the man of spiritual tendencies, being naturally deficient in earthy ingredients, has no undue fondness for acquiring riches, and remains poor without discontentment or grumbling. The signs of those abounding in material desires are given above under the head of Accumulativeness.

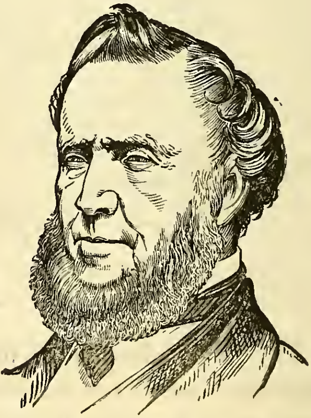
MONOEROTICITY.—MONOGAMY

THE DISPOSITION TO LOVE ONE ONLY.

The dove or round shape of the eye openings is the most unexceptionable evidence of large mating love.



Monoeroticity Large—Mrs. Margaret Fuller Osoli, who preferred to drown rather than to leave her husband.



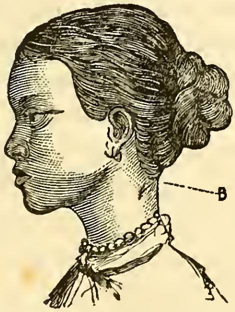
Monoeroticity Small — Brigham Young, the noted polygamist.

The attention is riveted upon the being on whom we have lavished our love and affection, to the exclusion, for the time-being, of any other object that may be within the range of vision, and we find that a tendency to unity of affection is very generally allied to the possession of the round form of eye which, unlike the form which is long from side to side, and adapted for surveying a broad surface, is circumscribed in its range, and not likely to see many objects instead of one. We conclude from this that a tendency to unity of love is the result, not only of oneness of vision, but also of unity of structure, of which round eyes, limbs, form, &c., &c., are only the outward indications.

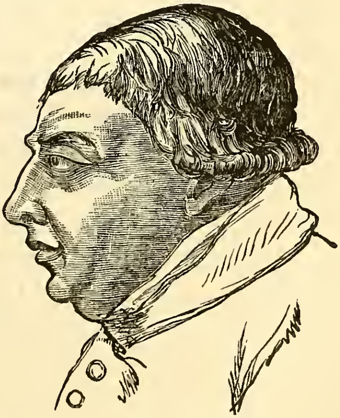
VOLUNTATIVENESS.—WILL.

HAVING STRENGTH OF WILL AND POWER TO EXECUTE IT.

The ability of exercising the will, or of forming a purpose, may be known by the fulness of the posterior part of the neck, near the point of junction with the head. The neck of George III. of England indicated the strength of will for which he became notorious, and was the primary cause of the freedom of North America.



Voluntativeness Small—A Chinese woman without optative power.



Voluntativeness Large—George III.

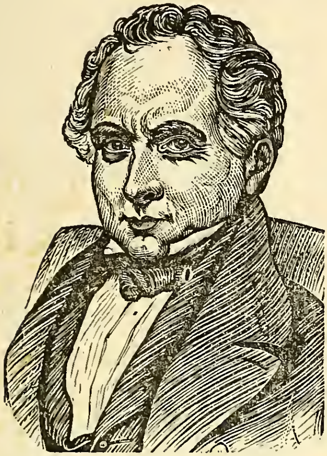
This is embodied in an over-development of the Muscular department, in comparison with the sizes of the other component parts of the body. Now, as contrary action is an inherent principle in the movement of the muscles, the one with the other, an excess of muscular power is the infallible indication of an inclination to work at cross purposes—to thwart and obstruct at every corner and turning of life, with his own will. The individual is constructed throughout his entire system upon the contrary; and will, or Muscular principle, and his pig-headed disposition is only the natural outcome of the peculiarity of the structure within.

MERRINESS.

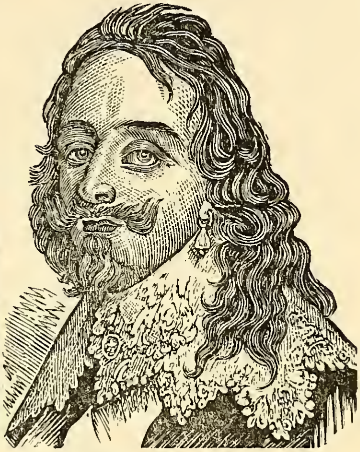
THE QUALITY OF BEING GAY AND LAUGHING.

Wrinkles obliquely outwards and downwards from the eyes, open lips, and a round large forehead are evidences of large merriness. Mirth also gives an expression of half-smile and funny look, and an arch and knowing expression of countenance.

An excess of indulgence in the merry inclinations will result in wrinkles stretching obliquely outwards and downwards from the eyes, and these wrinkles will ultimately assume a fixity of form, and indicate a stratum of past hilarity, as well as give a foretaste of explosions in the future. By the same rule, the mouth of an inveterate laugher will ultimately assume the open form, as if to be prepared for an abrupt emergency, or a sudden outburst of mirth, and to be ready on all occasions for the performance of its favourite duties. Much laughter also causes a rush of blood to the brain, and thereby gives an inclination to the round, large form of the forehead. The half-formed smile and amused look lingering on the visage of the laugher, are the vestiges of previous outbursts of merriment.



Merriness Large—Thos. C. Haliburton, "Sam Slick." Humorous writer of Nova Scotia.



Merriness Small—Charles I., who never laughed after he became king.

PROVIDENTNESS.

THE DISPOSITION TO FORESEE WANTS AND MAKE PROVISION TO SUPPLY THEM.

Wide hips and full muscles are the distinctive signs of a provident person. When this characteristic is excessively large, it is accompanied with protrusion of the lower part of the face.

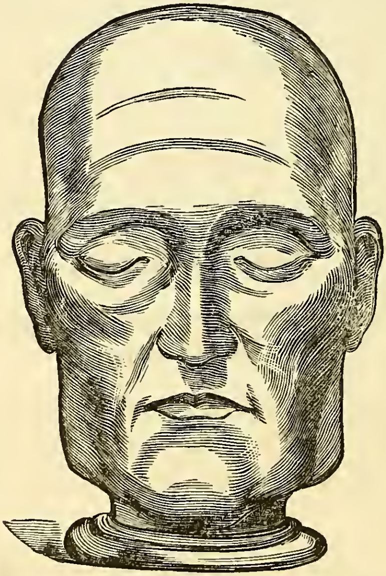
Providentness has its origin in strength, guided and regulated by a cool and cautious judgment, capable of restraining and purifying passion and unbridled energy. The conjunction of wide hips with largely developed muscles demonstrate the allied presence of strength and judgment—

strength reposing in the muscles, and width of form bespeaking breadth of mind, as body and mind bear due proportion to each other.

CONTRATIVENESS.—CONTRARINESS.

THIS QUALITY, OR FACULTY, IN HUMAN BEINGS, IS THAT WHICH GIVES THE DISPOSITION TO ASSUME THE OPPOSITE, AND IN ANIMALS, TO ACT CONTRARY TO THE WISHES OF INDIVIDUALS, EITHER MEN OR ANIMAL.

The capacity of Contrativeness exhibits its indices by width through the face, at the angle of the jaws. It is large in the hog and the Hottentot.



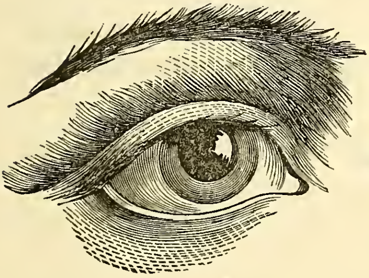
Contrativeness very Large—Napoleon I. Copied from a cast taken from his head after death.

Contrativeness occupies the same platform with that of Voluntativeness, with this difference, that the former is more moderate in action, and more considerate than is evinced in the exercise of pure will.

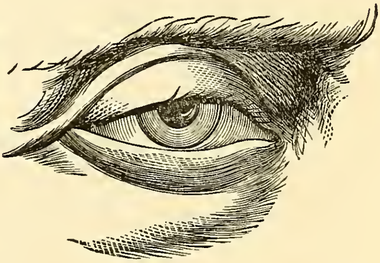
POLYEROTICITY.—POLYGAMY.

THE DISPOSITION TO LOVE MANY.

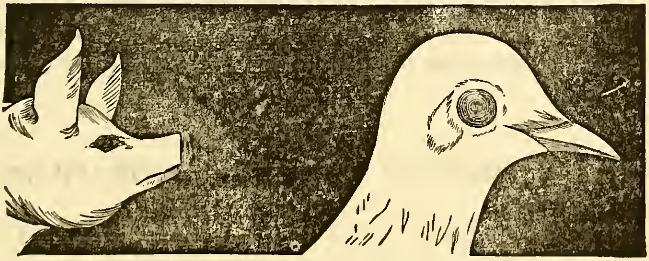
The amount of love for the opposite sex may be known by the fulness of the eyes, and its quality by the shape of the commissures, or opening between the lids of the eyes. When the opening is quite almond-shaped, promiscuous love prevails in that form; if the commissure has great vertical measurement, the love is connubial.



Polyeroticity Small—The eye of Mrs. Margaret F. Osoli.



Polyeroticity Large—The eye of Brigham Young.



Polyeroticity Large—The head of a Hog (*Genus Sus.*)

Polyeroticity Small—the head of a Turtle-dove (*Turtur Auritus*).

In the range of Physiognomy everything partakes of a lower nature when built upon the wide and low form, and as eyes that are wide or almond-shaped in their openings have a less vertical measurement than in cases where the round form predominates, we find the mind putting itself forward by broad channels, as it were, in search of objects of love, and totally regardless of worth in the unfastidious breadth of its grasp. This exhibition of love is more bestial in its nature, and has little in common with Monoeroticity, which is pure and angelic in its tone.

MNEMONICONOMINALITY.—MEMORY OF NAMES.

THE MNEMONIC POWER OF RECOLLECTING NAMES.

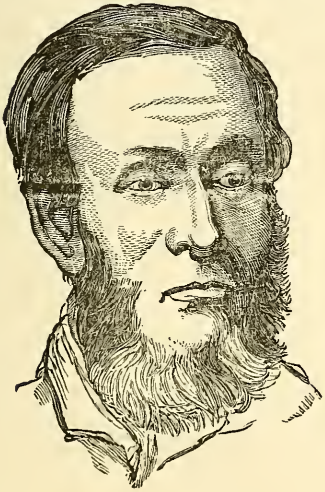
Memory of names manifests itself by a forehead full in the centre, from the nose to the hair, and a pair of lips full and flexible.

A fulness of the lips bespeaks the power of catching up and reproducing sounds of names, &c., which the individual has heard uttered. A sharpness of the centre of the forehead indicates the presence of acute sensations, and that *there,* whatever sensations are received are also faithfully retained. Those two combined (if the throat and the other vocal organs be well formed), endow the possessor with the faculty of faithfully retaining and reproducing the utterances which are given forth in his presence.

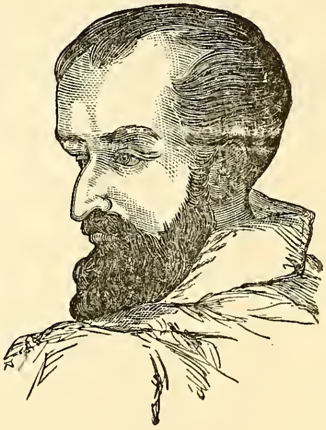
CHROMATICALNESS.—PERCEPTION OF COLOR.

THE INNATE QUALITY THAT CLEARLY PERCEIVES AND JUDGES TINTS, HUES, AND COLOURS.

A pale or milk colour of eyes, and a livid, white hue to *the skin, indicate a poor judge of colours. When we find all the bones of the nose and lower part of the forehead very prominent relatively, as compared with the other portions of the face, the person with such features can readily judge colour. But, should the centre of the eyebrows be narrow and sunken backwards, the person will be partially, if not entirely colour-blind. Chromato-pseudopts are quite common; as the late Dr. George Wilson, of Edinburgh, while investigating the subject, discovered. Out of* 1154 *persons, whom he examined, he found that there were over five per cent. who were idiopts, or colour-blind.*



Chromaticalness Small—Wm. Ross, who is a chromo-pseudop, or colour-blind.



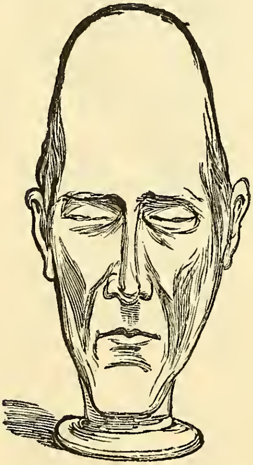
Chromaticalness Large—Antonio Allegri, or Corregio, a distinguished Italian painter.

The general law or principle upon which the human faculties are founded is well illustrated in the matter of colour, and the power of judging and appreciating shades and hues of colour. The cadaverous, colourless individual is entirely devoid of taste or judgment in the matter of colour, and he is so simply because, by the infallible law of nature, no man can judge, outside of himself, that which does not enter into his own composition.

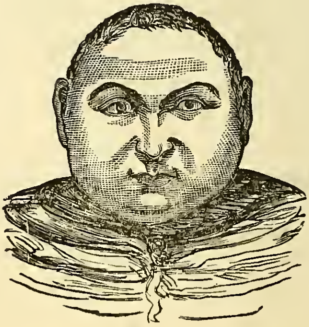
DEMOLITIOUSNESS—INCLINATION TO DESTROY.

THE PROPENSITY TO MAR, DEFACE, OR DESTROY

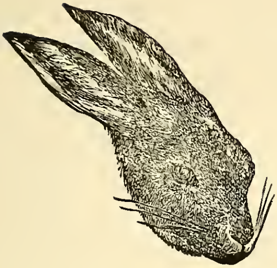
The low, flat nose, which is particularly wide where the wings of the nostrils join the face; the wide, short ear, broad foot, deep chest, large neck, heavy jaw, and low forehead, are the signs which point out large destructiveness as unerringly as the shadow on the dial indicates the direction of the sun.



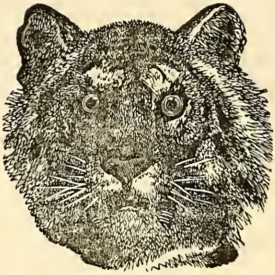
Demolitiousness Small—B. Gosse, Esq., of London, who gave indiscriminately to every object regardless of worthiness, and disliked to destroy anything.



Demolitiousness Large—John R. Webster, a murderer and natural thief, confined for life in the Penitentiary at Jackson, Michigan, since 1854.



Demolitiousness Small—
The head of a Hare.



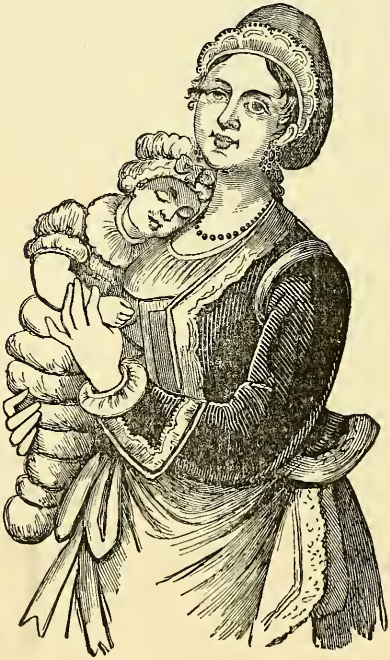
Demolitiousness Large—
The head of a Tiger.

To produce the capacity of destroying, the chief element required is strength, and where there is an absence of strength, there can be no power of destruction. Now, to endow an organization with strength, it is absolutely necessary that that organization should be constructed on the wide plan, and therefore the wide form in all departments of animal life shews the presence of strength and the faculty of demolitiousness. To contribute additional strength to a board of wood, the width would naturally be extended, while an extension of the length would only contribute to its weakness. Nature certainly conducts her operations with vastly more intelligence than man, and accordingly we find her producing strength by widening also, and not lengthening. The carnivora, or the animals that subsist on the flesh they have killed, require sufficient strength to overpower and kill their prey, and they are therefore built on the wide and strong plan throughout. This width is an indication of an excess of muscular power, and being an excess, it is unbalanced and unguided by a relative share of the other forms, and necessarily demands the slaughter to which it is addicted, on which to expend its superabundant Demolitiousness. Each form, in proportion to its degree of development, contributes its share to the proper regulation and government of the whole, and from this general rule we may draw the conclusion, that the man is nicely balanced in his desires who has an equal growth of each form; and that the man who is powerfully developed in all is the most happily and usefully constructed.

PHILONEPIONALITY.—LOVE OF YOUNG.

THE CHARACTERISTIC OF FEELING PLEASURE IN THE YOUNG.

Watery or moist eyes, and lips thick in the centre, are indicative of the love of children.



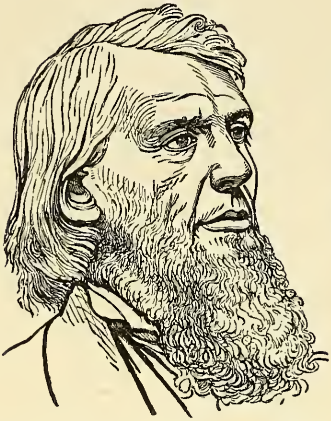
Philonepionality Large—A loving Italian mother.
Costume della Donna di Mariennella.

The governing inclinations of any individual may be discovered by watching the individual while a certain propensity is greatly exerted. The mother, bursting with tenderness for her child, passionately presses her lips to its tiny form. It would therefore be highly analogical to conclude that love of offspring manifested itself in the lips by kisses, or pathognomy, as well as by physiognomical strength. To sift the laws of nature to their first origin, and demonstrate why she has placed the sign of Philonepionality in a fulness of the lips, would be a divergence from our subject proper, and a raid upon the domain of metaphysics. Nature causes the production of fruit only when there is abundance of juice in the plant, and in like manner children can only be brought to life when there is an abundance of the vital fluids of life, and in conferring the power of producing young, she also gives the love of offspring, which is necessary for its preservation during the helpless years of infancy and youth. Nature makes provision for the preservation of all her vast family during those early stages, when they can do nothing for their own maintenance in life, and this preserving care we see in the full lips, caused by the abundant juices, the moist eyes, and flowing saliva of the mother.

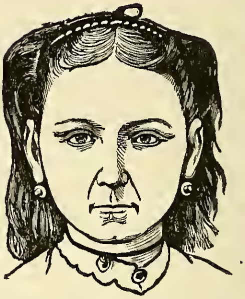
LINGUITIVENESS.—SPOKEN LANGUAGE.

THE ABILITY TO UTTER ARTICULATE SOUNDS SUCCESSIVELY, IN SUCH A MANNER AS TO CONVEY INTELLIGENCE.

Protruding and flexible lips, capacious mouth and jaws, with a full throat, are determining evidences of large spoken language.

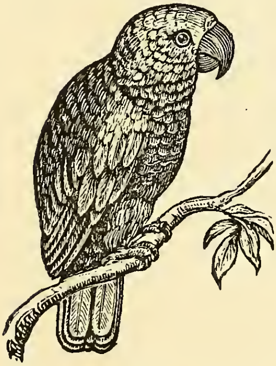


Linguitiveness Large—John B. Gough, the eminent temperance lecturer.



Linguitiveness Small—A beautiful and intelligent deaf and dumb girl of Illinois.

Speech is produced by the united efforts of mouth, throat, lips, teeth, tongue, and palate, and the relative sizes and flexibility of these parts may be taken as evidences of the power of uttering articulate sounds; because that which produces should, and by a law of nature *does*, bear due relation to that produced in size, shape, texture, quality, power, elasticity, &c.

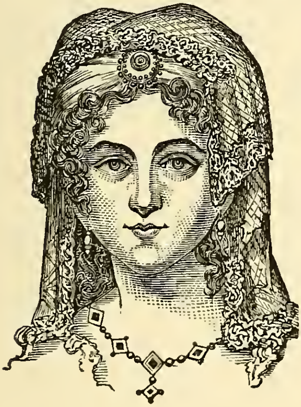


Linguitiveness Large—A Parrot.

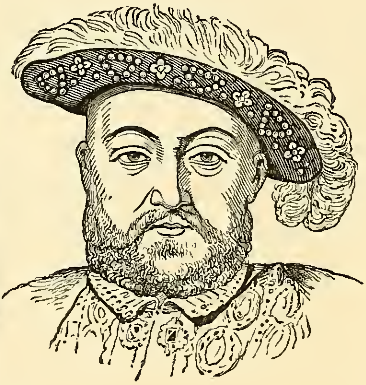
PHYSIODELECTATIOUSNESS—PHYSICAL PLEASURE.

THE DISPOSITION AND INCLINATION FOR SENSUAL DELIGHTS.

Those who prize most highly sexual pleasures, and devote most time to their enjoyment, will have a thick under eyelid, which crowds up upon the eyes, except in those given to indulge in intoxicating beverages, whose lower eyelids in age will fall away from the eyeball, as if tired of their situation, or weary in assisting the eyes to such low desires; they turn away in disgust from screening the drunken stare of their degraded owner.



Physiodelectatiousness Small — Marchioness of Hertford.



Physiodelectatiousness Large—Henry VIII.

Excessive indulgence in sexual or other physical pleasure causes the crowding upward upon the eyeball of the under eyelid, and the reason is obvious. During the performance of pleasureable acts, the under eyelids are drawn upwards so as almost, if not quite, to close the eye; and much indulgence of this kind has the tendency to cause the eyelid to remain permanently in the position into which it is forced, at a time when the whole system is wrought up into an intense state of nervous excitement. Yet much nervous excitement will cause the under lids to fall away from the eyeballs in old age, as a result of muscular exhaustion, arising from over-excitement of the nerves of sensation.

Oft repeated acts of the body have a tendency to cause the parts acted upon to assume permanently the positions into which they are so often forced. The habits of the individual become indelibly stamped in readable characters upon his exterior; and reflective people may well look to these as warnings or guides, as the case may be.

CURATIVENESS.—CURATIVE POWER.

CURATIVENESS IS THE FACULTY THAT ENABLES ONE TO ADOPT THE MEANS AND APPLIANCES NECESSARY FOR THE RESTORATION OF HEALTH OF BODY OR SOUNDNESS OF CONSTITUTION.

The physiognomical evidences of this faculty are, strength of form and healthy vigour of constitution.

To contribute to the health of others we must first be in possession of health ourselves, in accordance with the unfailing law of nature, that we cannot impart that which we do not possess already. When strong and weak come together, there is an imperceptible transference of vital energy or magnetism from the strong to the weak; and though the former may not be conscious of that loss that is soon repaired by the resources of a vigorous constitution, yet none the less does the latter derive benefits wherewith to assist in rebuilding the breaches that have been made in the constitutional wall. The signs of Curativeness that we have given above are the signs of health and strength—the panacea that the enfeebled most desire.

SOLICITIREPUTATIVENESS.—DESIRE OF APPROVAL.

AN INNATE WISH FOR THE FAVORABLE OPINION AND EXPRESSION OF OTHERS.

Thin-skinned or red-lipped people are always sensitive to the opinion of others about them. The head turned a little to one side, the voice low and insinuating, courteous and obliging manners, are stable signs of a strong desire of approbation.

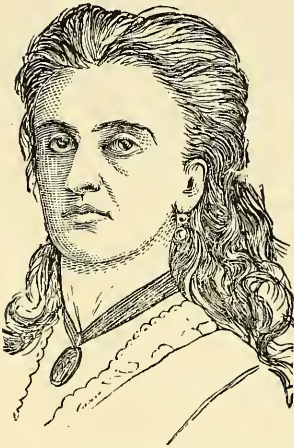
When we find a brain large, joined to a thinness of skin, we may predicate with safety that the possessor is very sensitive to the influence of external circumstances; and if to these be added a fulness of muscular development, we have before us the organization most liable to feel the action of both things material and things immaterial, such as adverse opinions, &c. The man who is sensitive in one department of his structure is, by the operation of a natural law, sensitive in all; and we consequently conclude that thin-skinned people—as indicated by a redness of the lips—are sensitive, not only to material touch, but to anything else having a tendency to disturb the mental equilibrium.

INEXORABLENESS.

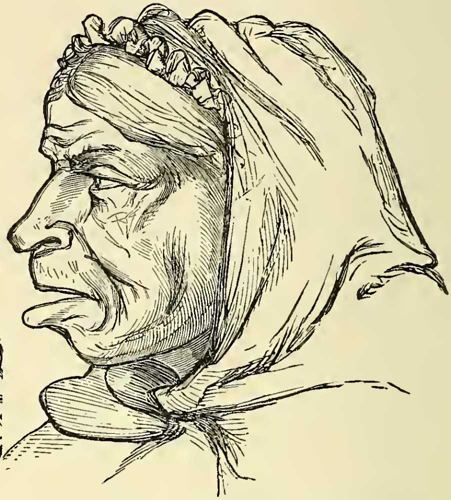
THE QUALITY OF BEING INEXORABLE, UNRELENTING, IRRECONCILABLE IN ENMITY.

A cross, inexorable look, an aversion to laugh, and a protruding under-lip beyond the upper, are unmistakable indications of an implacable disposition.

This tendency limns out on the exterior of the Physiognomy, a striking picture of what is going on within, and the labour that is being performed by each and every of the faculties. A predominance of feelings of this kind gives a cross-grained disagreeable appearance to the features; a studied avoidance of laughter, which has no sympathy whatever with anything of this kind.



Inexorableness Small—Mary F. Scott Siddons.

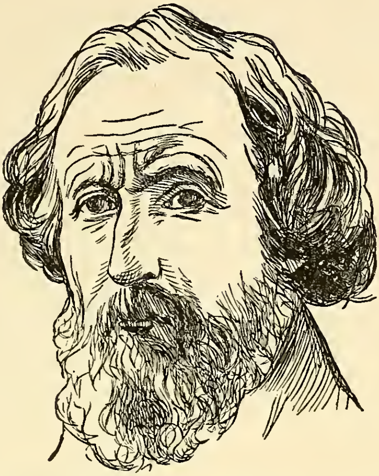


Inexorableness Large – An Irish woman of Edinburgh. A gabbler.

CONSECUTIVENESS.

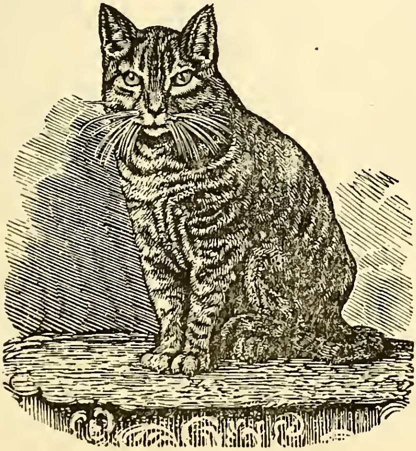
THE CAPABILITY OF APPRECIATING AND PRODUCING PROPOSITIONS IN CONSECUTIVE ORDER.

Perpendicular wrinkles in the forehead, immediately above the nose, and horizontal wrinkles, or a wrinkle, across the nose, near its junction with the forehead, are unfailing signs of large CONSECUTION.



Consecutiveness Large—Cyrus W. Field, a projector of the Atlantic Telegraph Cable.

When the mind is riveted for a continuance of time upon one subject, or one set of subjects, the brow at the top of the nose is naturally drawn together by the contraction of the corrugator supercilii muscles; and if this action be indefinitely prolonged, the final result will be, that the brows remain fixed in the positions so often assumed, with a wrinkle or two of a vertical kind dividing the series. This is the natural result of a oneness of action, indulged in without stint, and, like most of the characteristic



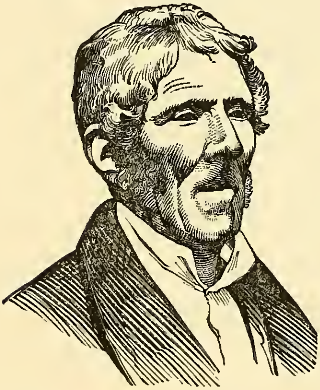
Consecutiveness Large—A selfish Cat, taken from life.

signs, it is simply the superabundance of long and oft indulged habit.

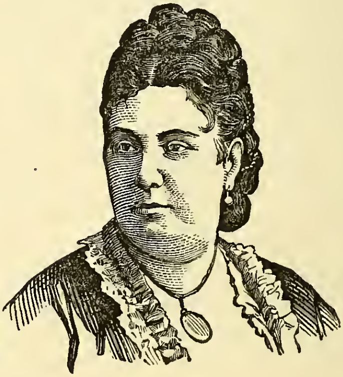
SONIDIFFUSITIVENESS.—CAPACITY TO SING.

THE CAPACITY OF PRODUCING OR MAKING A SOUND OR MUSICAL TONE WITH THE MOUTH—VOCIFERATIVENESS.

A full throat, large thorax, open nostrils, and protruding lips, with good length from the point of the nose to the point of the chin, and full cheeks, are faithful signs of the power to give forth tone, if the ear be round and prominent, so that it can first receive the tone.

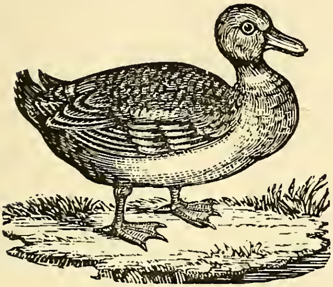


Sonidiffusitiveness Small—An Irish peasant, who could not sound a note correctly.

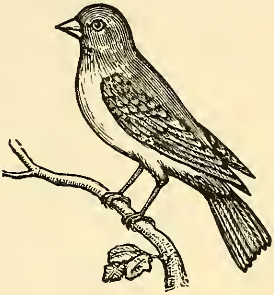


Sonidiffusitiveness Large—Parepa Rosa, a celebrated singer.

The mouth being the only point of egress throughout the system from which it is possible to give forth sounds of a musical character, it naturally follows that in the mouth and its concomitants only have we any hope of being able to judge, from external appearances at all events, of the capacity of any individual for music. It is utterly useless to go elsewhere to look for the outward musical signs; and if desired to estimate the capacity of a water-pipe for the delivery of a certain quantity of water, we might as reasonably, for that purpose, measure minutely the size and dimensions of the nearest fence post, as to investigate any other part of the body than the mouth for an idea of the musical capacity lodged therein. It is, therefore, by the mouth only and its surroundings, such as the throat, palate, teeth, tongue, &c., that we can judge of the extent of the development of the musical power.



Sonidiffusitiveness Small—A Duck. The flat bill of the duck gives a flat unmusical sound.



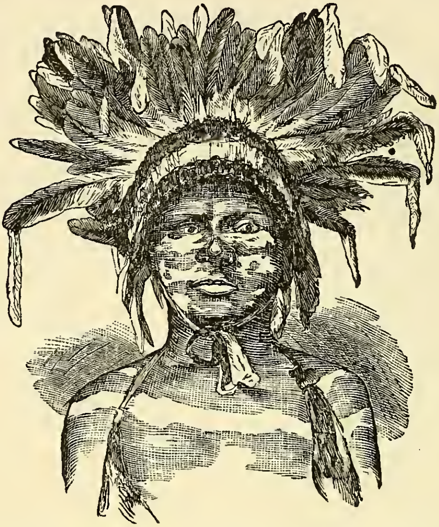
Sonidiffusitiveness Large—A Canary. The round beak of the canary gives a round musical sound.

DECORATIVENESS.

THE TENDENCY TO ORNAMENT IN A BECOMING OR UNBECOMING MANNER.

A full eye, accompanied by arching, thin, long eyebrows, are emblematic of decorativeness.

Decorativeness is the faculty that delights in an arrangement of things so as to constitute an adornment that has a pleasing and satisfactory effect upon the eye; and it is, therefore, from the conformation of the eye that we must gather materials for estimating the decorative capacity of the individual, or his power of appreciation in regard to the beauties of decoration. That kind of eye that is adapted for taking in at a glance, and comprehending a large range of beautiful scenery, will be found invariably to stand out from its sockets, and by reason of this conformation it can turn conveniently within a great visual range to take in as much as possible of the thing in which it takes the greatest delight. Thin long eyebrows, again, denote a fineness of organization capable of judging of, and delighting in, fine objects. We have already shewn that fullness of the under part of the forehead indicates the possession of strength of sight, and a conjunction of all of the above varieties allied to comprehension mark the able and artistic decorator.



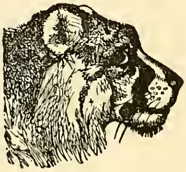
Decorativeness Large—A Digger, an Indian, of California, adorned for the war dance.

HUNTATIVENESS.—SEARCHING INCLINATION.

THE DISPOSITION TO SEARCH FOR, OR FOLLOW AFTER, ANY PERSON OR OBJECT.

Some of the physiognomical records of this endowment are, fulness in the forehead, immediately above the top of the nose, good muscular and bony systems, with the head carried well forward from the body.

Unlike the dog, or, at all events, most of the canine species, we do not hunt after any object by the sense of smell, but invariably call in the assistance of the eye; and by one of her unchangeable laws, when nature invests any particular member with unusual strength, she strengthens the surrounding parts, as if to lend the greatest amount of countenance and assistance to the central figure. For example, a powerful knee is accompanied by a strong leg, and strength of arm is allied to breadth of shoulders and chest. So also, when an individual is gifted with a great and piercing range of vision, the eyes are found strongly reinforced by a fulness in the immediately overlying portion of the forehead, and as this conformation of eye and accompanying frontal development are the necessary attributes of a successful hunter, we may conclude that a fulness in the lower forehead, immediately above its junction with the top of the nose, is at least one sign of such an individual. Another requisite for a successful hunter is unwavering attention, and the exercise of close attention on the object in pursuit, having the immediate effect of carrying the head in a forward direction, as if to place it as near as possible to the desired goal. We may discern in this projecting carriage of the head an infallible sign of Huntativeness.

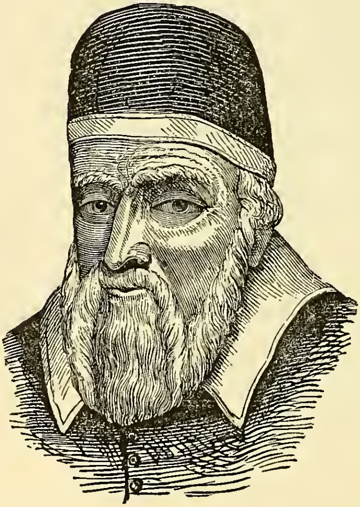


Huntativeness Large —The Chetah, or hunting Leupard of India and Africa.

SAGACITIVENESS.—SAGACITY.

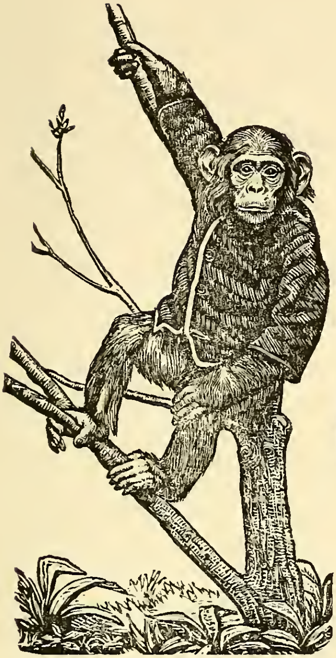
SOUNDNESS OF JUDGMENT AND SHREWDNESS ARE CONCOMITANTS OF THE FACULTY OF SAGACITIVENESS.

The short, round neck is one of the natural accompaniments of Sagacitiveness. Napoleon I. had an extremely short neck, his head apparently resting upon his shoulders; and all Europe learned, by sad experience, his overwhelming sagacity.

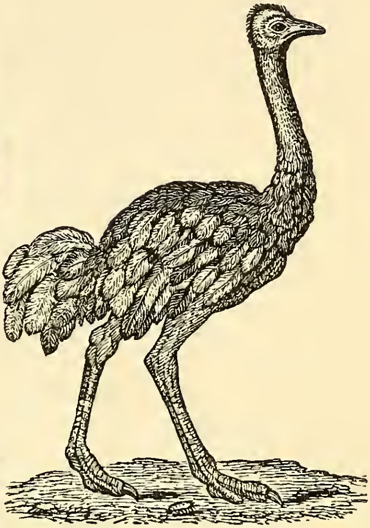


Sagacitiveness Large—Thomas Parr, who lived to the rare old age of 152 years. At the age of 120 years, he married a second wife, by whom he had issue.

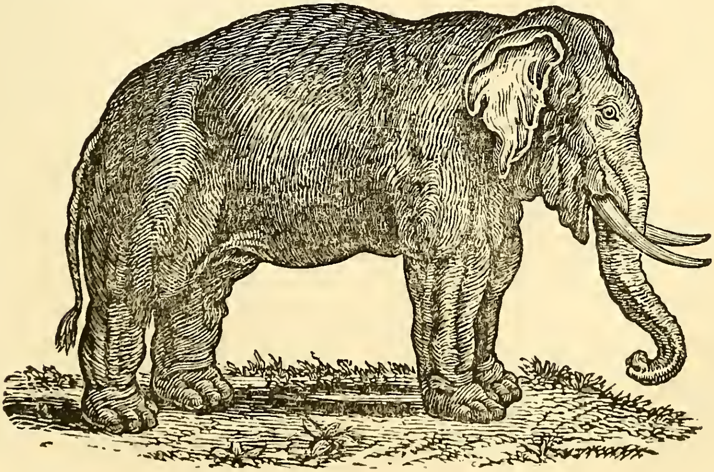
The closer we approach the brain, or seat of sensation, to the heart and lungs, from which the blood is derived for the maintenance of that sensation; and the more capacious the neck and its arteries for conducting the supply of blood to the brain, the more vivid will be the sensations, and the sounder and more critical will be the prompt decisions of the judgment—judgment being the coalition of strength



Sagacitiveness Large—A Chimpanzee, taken from life, in the Zoological Gardens of London.



Sagacitiveness Small—An Ostrich.



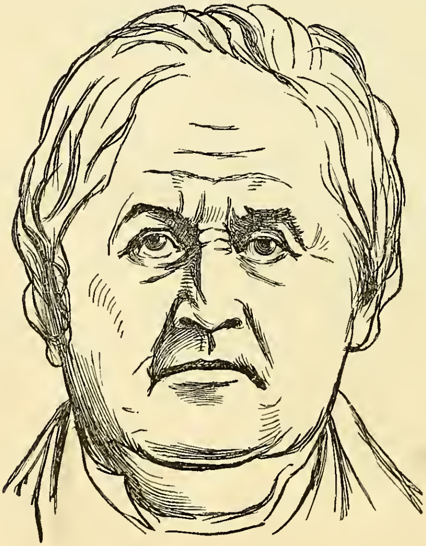
Sagacitiveness Large—An Asiatic Elephant.

with acuteness of sensation, the one giving the strength and the other the precision for arriving at sound, prompt, and judicious conclusions. A large brain gives rapid and strong sensations; large heart and lungs give strength; and accordingly, when brain and thorax are near each other, and connected by capacious and smoothly-working canals, we have the conjoint result of shrewdness.

TRADATIVENESS.—PRONENESS TO TRADE.

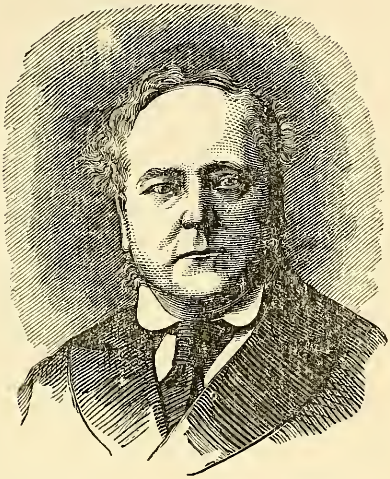
THE TENDENCY TO TRADE AND BARTER.

A wide rounding jaw, plump, short, elastic, and springy person, always very active, are symbols of a trading tendency.



Tradativeness Large—Jacob Strawn, the great farmer and cattle dealer of Illinois.

Those who are formed on the muscular plan, with moderately sized bones that will admit of an easy change



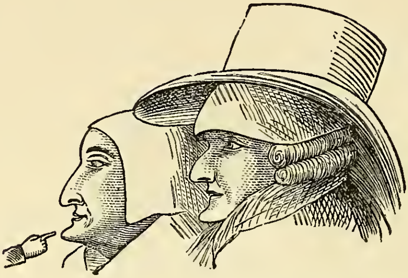
Tradativeness Large—Mr. T. Glover, a dry goods merchant of Quebec.

of place are adapted for the acquirement of money and other kinds of property, and are consequently the very people to succeed as merchants or tradesmen. A wide jaw indicates the presence of predacious energy, and this is an important element in the composition of a successful trader.

ADAPTATIVENESS.—APPROPRIATIVENESS.

THE FACULTY WHICH PERCEIVES AND DETERMINES THE FITNESS OF PERSONS OR THINGS FOR EACH OTHER.

A long narrow chin that reaches well forward is the sign of appropriateness; and the individual possessing largely this disposition, will be a good judge of the adaptation of one thing or person to another.



Adaptativeness Large—Thomas Cook and Wife, who were well adapted to live together, for one was as avaricious as the other was miserly.

When the chin stretches well forward, it will be found that in accordance with the law of correspondence the whole of the perpendicular range of the face will also have a projecting tendency, and as these parts of the face are indicative of sensation, on account of the greater number of sensations being situated relatively in the centre of the face, as those of taste, smell, and sight; this portion, when full, would denote great sensational quickness which is requisite for determining the fitness of persons or objects for each other.

THE FACULTIES, THEIR SIGNS AND PRINCIPLES.

CLASS IV.

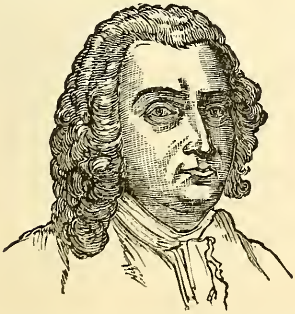
THE COGNIZANT CAPACITIES.

THE FOURTH CLASS OF CAPACITIES BEING LARGE, THE OSSEOUS OR BONY FORM WILL BE FOUND PREDOMINANT IN THAT PERSON.

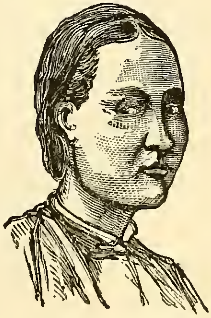
DISCRIMINATIVENESS.—DISCRIMINATING CAPACITY.

THE FACULTY WHICH DISCERNS AND JUDGES THE DIFFERENCE OR RESEMBLANCE OF OBJECTS OR IDEAS.

The nose that seems divided at the point into a right and left part, and has a firm appearance, and a fulness of the lower brow, should not be passed by when looking for signs of discrimination.



Discriminativeness Large—Linnæus, a celebrated Swedish Naturalist.



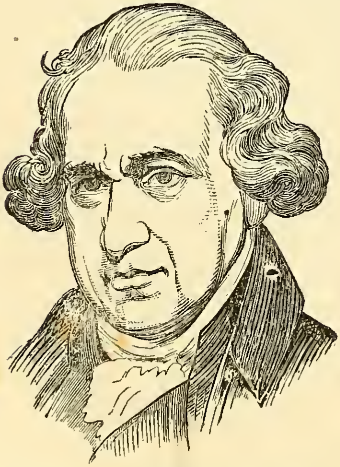
Discriminativeness Small—A Chinese woman.

THE first element of discrimination is the proper survey of the object by means of the eye, and it is in and around the eye, therefore, that we must look for the signs of discernment or discrimination of objects. Fulness over and around the eye denotes strength of comprehension. A division at the tip of the nose indicates a double or very powerful organization in the direction of strength of mind, and the stronger the mind, the greater power does it possess of analysis and discrimination.

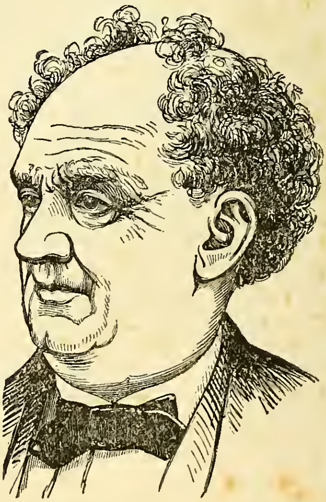
STRUCTURODEXTERITY.—MECHANICAL TALENT.

THE ABILITY OF FORMING AND CONSTRUCTING, READILY AND DEXTEROUSLY, MATERIALS OR MENTAL PRODUCTS.

Square faces with the bony form slightly in the ascendancy are the requisite physical indications of a good mechanic.



Structurodexterity Large—James Watt, the celebrated Inventor and Mechanician.



Structurodexterity Small—P. T. Barnum, who said he never could whittle a barrel tap round.

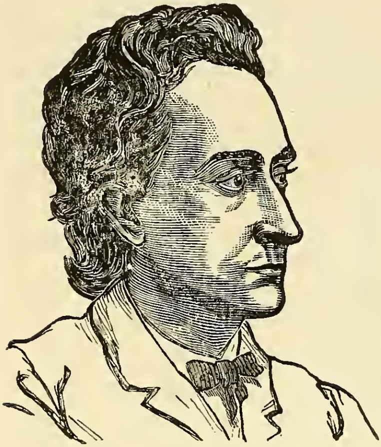
The main characteristics of mechanical labour are the manipulation of solid material into angles and straight lines, and it is therefore not surprising to find that those who are constructed on the straight or angled form, and into whose construction there enters a predominance of the hard or bony material, should prove the best adapted for work of this kind. As a general rule, the light-haired man does not succeed as a worker in iron, and this arises simply from the deficiency of iron ingredients in the composition of his frame; while, on the other hand, the dark-haired, swarthy man, in virtue of the nature of the construction of his body, is eminently adapted for such work, the iron which he receives into his frame from his daily occupation agreeing with him, and failing to produce the bad consequences which would accrue to his brother of the light-haired form, after a protracted continuance in work for which he is constitutionally unsuited.

ORDINIPHYSICALITY.—PHYSICAL ARRANGEMENT.

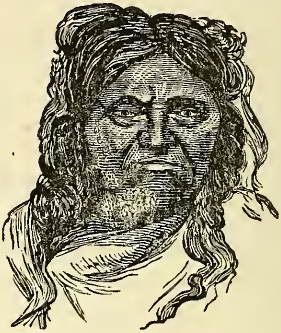
THE DESIRE TO ARRANGE PHYSICAL SUBSTANCES OR ATTRIBUTES.

Compressed lips of medium thickness, regular and rather thin well-defined features, accompanied with a systematic and regular pendulation of the hands, as well as precision and regularity of step, are unmistakable signs of material order. The language of physical order is an impulse to arrange articles so that they may bear due and systematic relation to each other.

Whenever it appears that nature has arranged in lines and orderly method the different parts of the body, so as to produce regular and systematic action throughout, the individual will be endowed with a large manifestation of Ordiniphysicality, in accordance with the law of nature which ordains that man must act in unison with the general character of his structure.



Ordiniphysicality Large—Edwin Booth, who is remarkable for the arrangement of material objects.



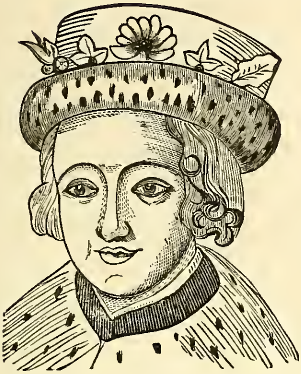
Ordiniphysicality Small—A disorderly Flat-head Indian.

ANGULARITIVENESS.—PERCEPTION OF ANGLES AND LINES.

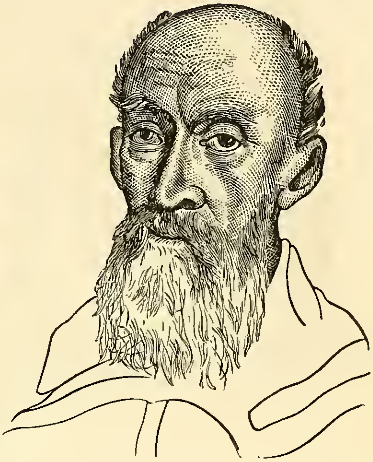
THE ABILITY OF APPRECIATING THE QUALITIES AND BEAUTIES OF ANGLES AND STRAIGHT LINES.

Angular form of ear, nose, malar or cheek-bones, brows, knuckles, knees, and every part of the human structure cannot be mistaken by a natural Physiognomist as the hieroglyphics of Angularity.

Large bones of an angular conformation naturally endow the possessor with a just understanding of angles and straight lines, whether manifested in fellow beings or in material objects; this law being in strict accordance with the elements of correspondence and fitness, the principles on which the capacity rests.



Angularitiveness Small — Edward V. of England, born 1470, smothered with his brother in the Tower of London in 1483.

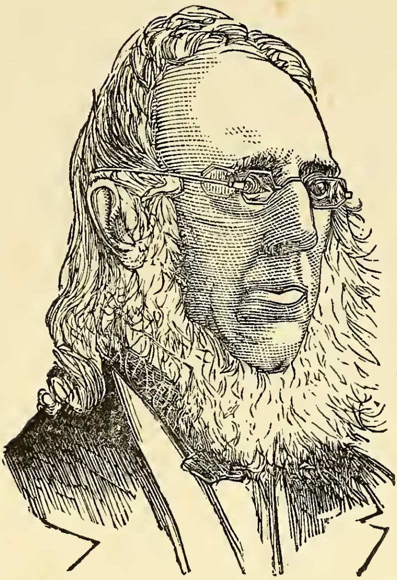


Angularitiveness Large—An old Cardinal, who was quite eccentric and angular.

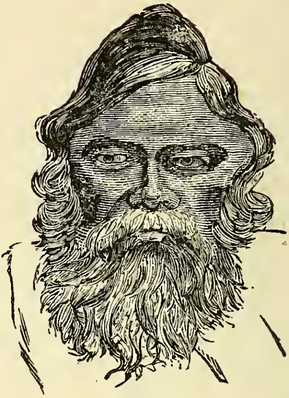
BENEFICENTNESS.—BENEFICENCE.

THE INCLINATION TO DO GOOD.

The long face joined to a receding forehead and a prominent nose, are nature's intimation of a naturally beneficent individual. Peter Cooper has the above form of features, and he annually educates several hundred children free of cost in the city of New York.



Beneficentness Large—Peter Cooper, the Founder of Cooper Institute.



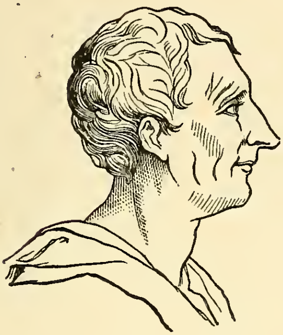
Beneficentness Small—An Australian man.

Before it is possible for an individual to do good, it is absolutely necessary that he should possess the qualification of goodness himself; and an indispensable condition of the possession of this quality of goodness, is, that the nobler aspirations should predominate over selfish and animal desires. On the *law*, therefore, that elevation of mind bears with it elevation of features, we rest the principle of Beneficentness. See the signs of Beneficentness above.

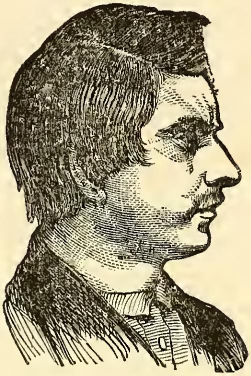
DECISIVENESS.

THE FACULTY OF PUTTING AN END TO CONTROVERSIES OR DOUBTS, BY AN ASSERTION, AN IRREFRAGABLE FACT, OR ARGUMENT.

Prominent and well defined features, in connection with a large active Brain form, are nature's records in favour of decision of character.



Decisiveness Large—Montesquieu, a French philosopher and publicist; possessed of great decision and integrity of character.



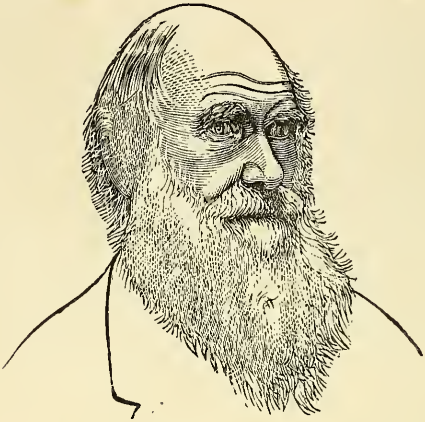
Decisiveness Small—Louis W. Jackson, an ignorant hireling, who murdered a man in Illinois for five hundred dollars.

The reason why prominent features, accompanied with a large active brain, are the index of the possession of decisiveness of character, is because, while the latter is adapted for receiving vivid impressions, and founding strong opinions thereon, the former denotes the element of strength and executive force, without which the formation of strong opinions is not possible.

OBSERVATIVENESS.—OBSERVATION.

THE QUALITY OR DISPOSITION TO LOOK CLOSELY AND WITH RIGID CARE AT EVERY OBJECT.

Full long arching eyebrows, which are lowered down close to the eyes, are the visible physiognomical expression *of a desire and capacity for observation. Darwin is an excellent example of large observation.*



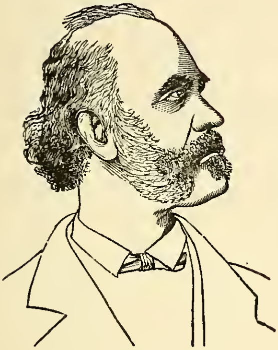
Observativeness Large—Mr. Charles Darwin, the Author of "The Origin of Species by Means of Natural Selection," and several other valuable works.

In looking intently at any object of curiosity or inquiry, the eyebrows are drawn down and crowd around the eyes, in order to shut out more than the exact amount of light that is necessary. Long practice in action of this kind will ultimately have the effect of inducing the muscles called so frequently into action permanently to assume their eagerly observant position, and to be permanently ready for the performance of the duties to which they have been accustomed so frequently to recur.

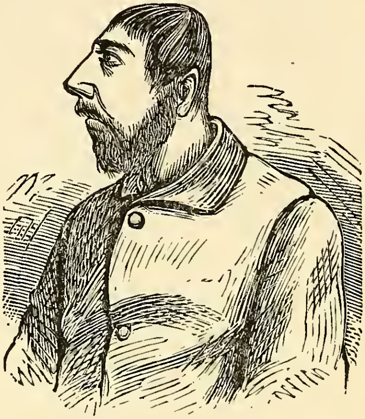
PERSISTENACITY.—PERSEVERANCE.

THE DISPOSITION OF HOLDING ON, THE PROPENSITY TO PURSUE A COURSE OF DESIGNS OR CONDUCT.

The body or ramus of the lower jaw, when long, may *safely be considered the certain evidence of remarkable* *PERSEVERANCE.* *This faculty is large in the bull-dog, and small in the fox and wolf.*

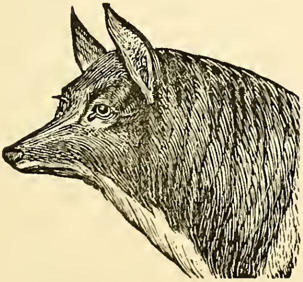


Persistenacity very Large—In confirmation of an examination of this gentleman by the Author, he said, "I have lost thousands of dollars by my excessive Persistenacity."

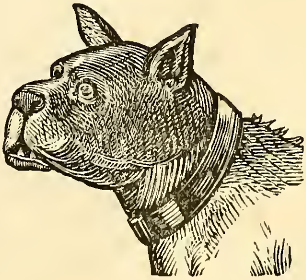


Persistenacity very Small-Johnny, who could not persevere in any undertaking sufficiently to succeed.

The long under jaw indicates tenacity of purpose, inasmuch as the formation shews the presence of great strength to hold on with the jaws when once they seize an object,



Persistenacity Small—A prairie Wolf, or Coyote.



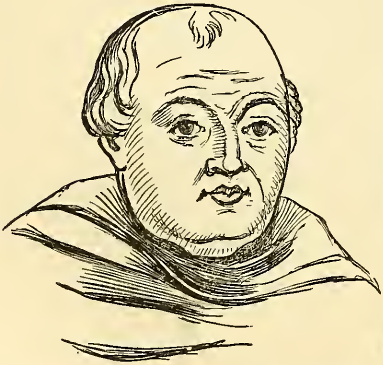
Persistenacity Large—A Bull-dog.

and nature inclines the possessor to exercise whatever strength may be possessed. Whenever the jaws indicate that the disposition to hold on is good, that character will permeate every fibre of the entire being, as the faculty is general in that form. With this strength to hold on, there is also perseverance or persistency, sticking like a leech to any project until success has crowned the effort. A Kentucky negro once gave me a very good definition of this capacity of leech-like tenacity—perseverance: his idea being that it was to "seize right hold and neber let go no more."

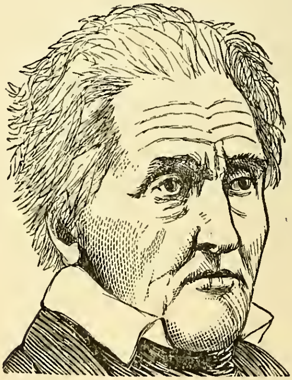
RECTITUDITIVENESS.—RECTITUDE.

THE FACULTY THAT INCITES HONESTY OF PURPOSE AND STRAIGHTFORWARDNESS OF CONDUCT.

Square bones, a bony chin, prominent cheek-bones, and eyes which are at right angles to the mesial line of the face, or which cut straight across the face, are signs of HONESTY OF PURPOSE.

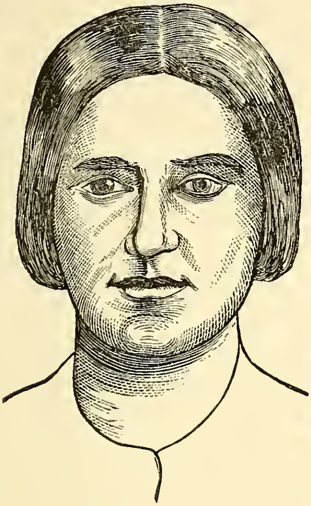


Rectituditiveness Small—John Tetzel, the *dishonest* face.

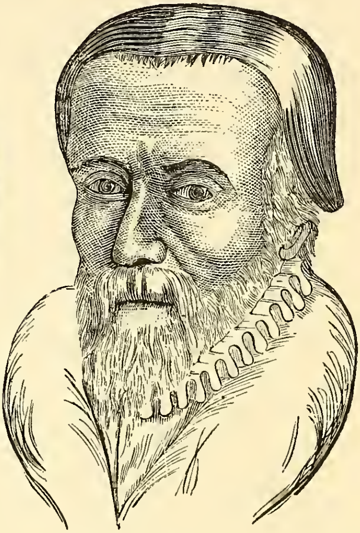


Rectituditiveness Large—Andrew Jackson, the *honest* face.

Square and prominent bones conjoined to eyes that cut directly across the vertical line of the face, are distinctive marks of Rectituditiveness; and this is the case in virtue of the character of the structure; because, wherever the square-boned form predominates, the individual is compelled, by a natural law, to act in accordance with his structure, and go straight and clear at his object. He cannot arrive at anything by devious or crooked ways, that being a mode of action entirely foreign to his nature, and his bones being on the straight-angled plan, he must act in accordance. Rectitude is derived from the Latin, *rectus*, straight, and rectitude is therefore the capacity of going straight, and according to the recognized and open methods in common usage in whatever state of society the individual may be placed.



Rectituditiveness Small — Lizzie Smith, a notorious pickpocket of the city of New York.

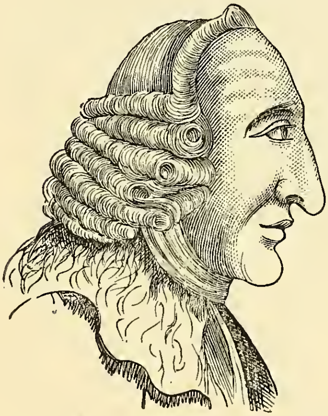


Rectituditiveness Large—William Tyndale, a translator of the Bible, and martyr for the same.

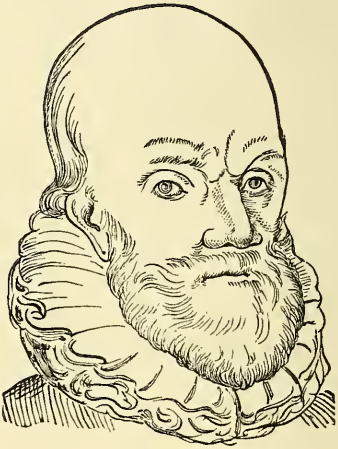
COMPUTATIONUMERICALITY.—NUMERICAL COMPUTATION.

SKILL IN COUNTING AND RECKONING.

Whenever we observe the outward extremities of the eyebrows running towards the top of the ears, or horizontally backwards, it is a sure sign of a quick, ready CALCULATOR; *but when the external terminus of the brows curve downwards to, or towards the malar bone, as in Lord Lyttleton, it is a trustworthy indication that the person thus facially marked sadly lacks the ability to perform accurate numerical calculations.*



Computationumericality Small—Lord Geo. Lyttleton, an eminent historian of England, who was unable to master the Multiplication Table, or any of the common rules of Arithmetic.



Computationumericality Large—Thos. Allen, a scholar in the reign of Queen Elizabeth, the first Mathematician of his day.

The instinctive drawing together and downwards of the interior portion of the eyebrows, as it is the facial position assumed when one is in close numerical thought, shews an inclination to a precision or exactness of thought which is indispensable to the study of Mathematics and the exact sciences; and when we find that long-continued habit has resulted in fixity of position, we may predicate of the individual that he possesses the capacity for this kind of exact thought in a high degree.

SOLIDATIVENESS.—JUDGMENT OF DENSITY.

THE POWER THAT JUDGES OF SOLIDITY OR COMPACTNESS.

When density is large, it reveals itself by a firm, quick step, and a well balanced gait; and in the face it betrays itself by a quiet, steady, thoughtful expression of the eyes.

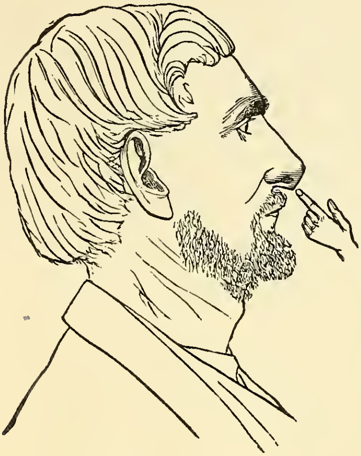
The man who is built on the solid or compact plan, is naturally well adapted for judging of anything into which the elements of solidity and compactness enter; because, having a high development of these qualities within himself, he can judge outside of himself that which he possesses inside, and the signs above given are only the expressions of a dense organization.

SUGGESTIVENESS.

THE POWER OF FURNISHING PRACTICAL ASSISTANCE OR DIRECTION.

The annexed engraving of Mr. Holcraft, of California, in which the septum of the nose is long at the place to which the index finger points, indicates an unusual amount of SUGGESTIVE FERTILITY OF MIND.

When the nose is longer in the *septum*, or its central portion, than in the *aleque nasi*, or wings of the nostrils, we have the evidence of the presence of a desire of doing good, and here suggestion is only offering practical aid in thought and words. The forms that partake of the long, slim-like grass, or pine and fir tree, have for the aim of their existence the furtherance of the good of others, rather than their own; whereas those of a short, squat, and thick build, live first and foremost for self, although, in the days of their old age and repentance, they may take to charities, alms-giving, *caritas, beneficentia, benevolentia*, &c., for the still selfish purpose of squaring their accounts with Heaven. When the central range of the face is full, in a vertical line with the nose, the possessor will delight in succouring others; but when the sides of the face are full, so as to produce a general roundness, self is the sole passion of the individual.

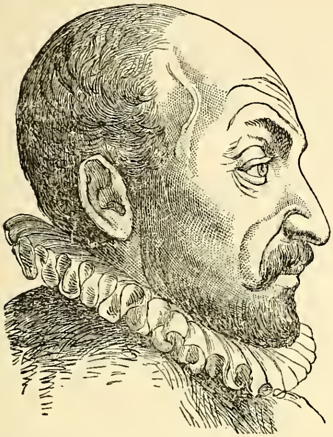


Suggestiveness Large—Mr. Holcraft, of California.

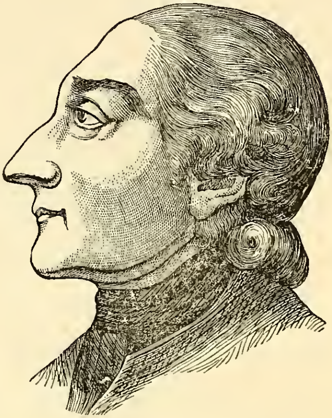
CHARACTERIOSCOPICITY.—PERCEPTION OF CHARACTER.

THE ENDOWMENT WHICH GIVES THE POWER OF PENETRATING AND UNDERSTANDING THE CHARACTER OF OTHERS.

Prominence of the frontal bone immediately over the inner corner of the eye, together with a prominent and *long nose, are unfailing evidences of keen perception of character.*



Characterioscopicity Large—J. B. Porta, a learned mathematician and Neapolitan writer, author of works on Physiognomy, Natural History, Optics, Hydraulics, and Agriculture. He was the inventor of the Camera Obscura. Born at Naples in 1540, where he died in 1615.



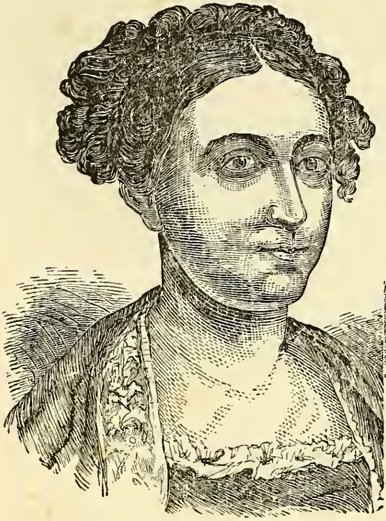
Characterioscopicity Large—Rev. J. G. Lavater, a Swiss Poet, and author of several works on Physiognomy. He was a talented Divine, and became pastor of the Church of St. Peter, at Zurich. His works have been translated into several European languages. Born at Zurich in 1741, where he died in 1801.

In order to possess the qualification in a high degree for detecting strength and weakness of character, it is necessary to inherit or acquire habits of close observation, and this endowment is indicated by a fulness of the frontal bone, immediately over the inner corner of the eye. The close observer must also have all his senses fully on the alert, and possess the essential element of caution, to avoid drawing erroneous conclusions, and this latter indispensable qualification is indicated by length of nose. A high development of the frontal bone, accompanied by sufficient length of nose, is therefore the index to power of reading and analysing character.

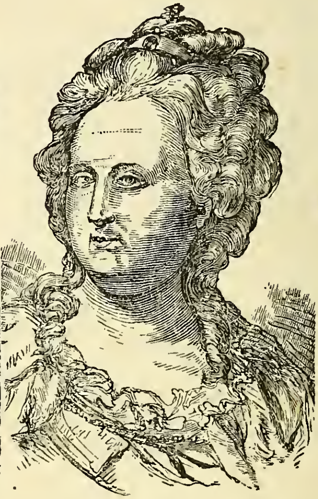
AMICITIVENESS.—FRIENDLINESS.

THE FRATERNAL DISPOSITION AND GREGARIOUS INCLINATION.

A broad forehead and open eye are evidential of true friendship.



Amicitiveness Large—Mrs Lydia H. Sigourney, a talented authoress and faithful friend to woman.



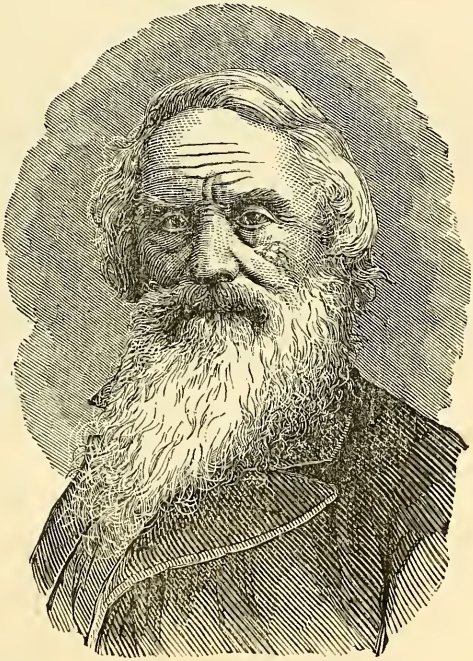
Amicitiveness Small — Catharine II., who possessed great intellectual powers, gross passions, and was void of amity.

The forehead expansive and indicative of largeness of brain, is strong evidence of acuteness of sensation, whether that sensation be produced by friends or by other causes, and a man thus endowed is more capable of receiving strong sensations of friendship, and of recollecting friends for a longer time than in forms of a different nature. An open, fearless eye bespeaks an open communicative person, ever responsive to the genial influence of companionship, while concealment and reserve are to amicitiveness what sterility and drought are to vegetation,—shrinking, withering, and shrivelling up the germs of life and vivacity.

ORIGINATIVENESS.—ORIGINALITY.

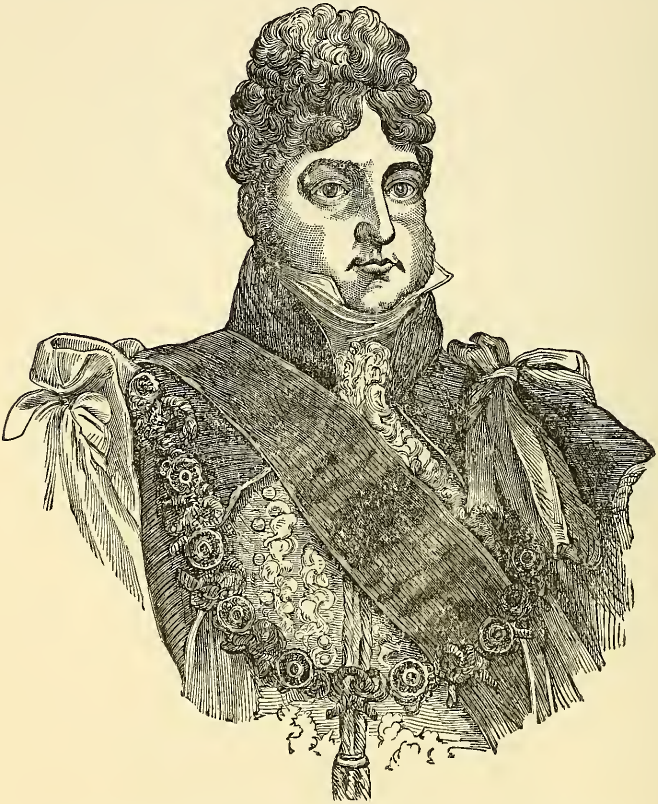
THE POWER OF PRODUCING SOMETHING NEW, UNLIKE ANYTHING PREVIOUSLY EXISTING.

Coarse, large features, such as a large nose, well raised from the plane of the face, ample mouth, wide cheekbones, and a strong look, rather than a fine and effeminate face, are indications of originality of mind. Professor Morse, the inventor of the Electric Telegraph, was a good example of originality.



Originativeness Large—Professor S. F. B. Morse, the inventor of the Electric Telegraph.

To discover new modes of thought, and to strike out upon fresh felds and pastures new, require great strength, and the physiognomical indications which we have given above are only marks of this strength of mind which is necessary. To follow a beaten thoroughfare requires little



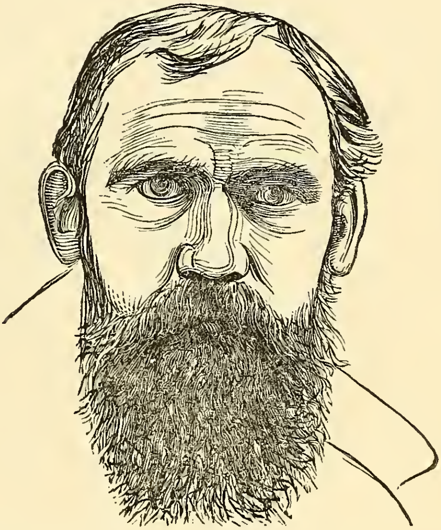
Originativeness Small—Geo. IV., a servile follower of fashions, and the practices of the demireps of his time.

effort and strength in comparison to the exertion necessary to break through hedges or forests, and establish a new route. This same requisition for strength is ever presenting her demands upon him who ignores the old ruts, scales walls, and dashes across streams impassable to the weak, in quest of new fancies and original thoughts.

MENSURATIVENESS.—DISCERNMENT OF MAGNITUDE.

THE PERCEPTION OR FACULTY WHICH PERCEIVES AND JUDGES OF MEASUREMENTS.

A general fulness across the lower forehead, long eyebrows, with a bony and square face, are excellent assurances of capability in recognizing and judging of magnitude or distance.



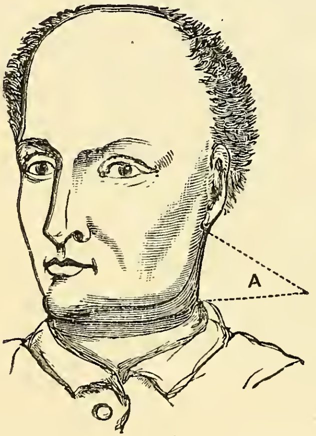
Mensurativeness Large—Mr. J. Q. A. Ward, Sculptor.

To measure and estimate anything by observation requires great strength of observance, and it is in that part of the head near the eyes, and in the eyes, that this strength resides, and it is by the degree of this crowding around the eye that we are enabled to judge of the powers and accuracy of observation on the part of any individual. A preponderance of bony material in the face, conjoined to the frontal peculiarities which we have just mentioned, shew the capacity of accurate measurement by a glance, because the ingredients are already within the system, and strength of eye is ready to assist the judgment.

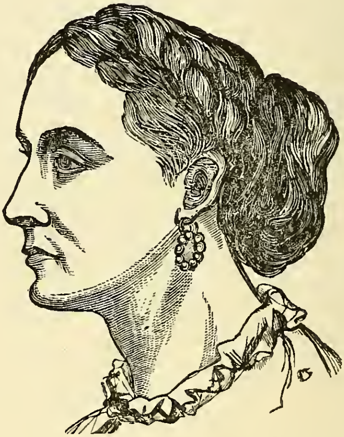
PERTINACIOUSNESS.

THE QUALITY OF BEING PERVERSE OF PURPOSE, AND PERTINACIOUS OF OPINION.

The power of OBSTINACY manifests itself by relative length in the limb of the jaw.

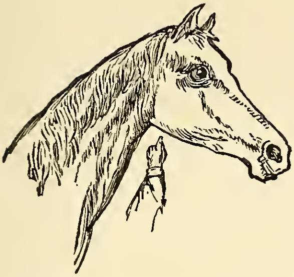


Pertinaciousness Large—Charles XII. of weden, the most stubborn ruler of Europe, called "the madman of the North."

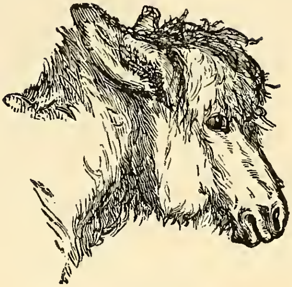


Pertinaciousness Small—Ristori, a talented actress in the Italian language.

The bone element being one of absence of movement or inertia, where largely developed, and under excitement, we have obstinacy, stiffness, or inertia of character. Now, length in the limb of the jaw being an unfailing accompaniment of this form, we may take it as the true index of the amount of Pertinaciousness present.



Pertinaciousness Small—The head of a hunting Horse.

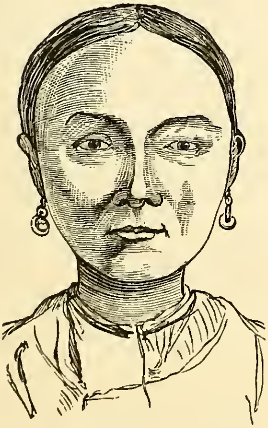


Pertinaciousness Large—The head of an Ass.

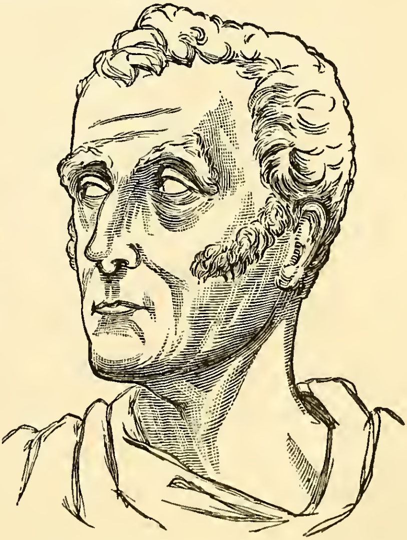
TEMPORIMECHANICALITY.—JUDGMENT OF MECHANICAL MOTION.

THE ABILITY TO JUDGE OF TIME MADE BY INSTRUMENTS, MECHANICAL APPLIANCES, OR DIRECT MOTIONS.

Mechanical time is known to a physiognomist by a squareness of the face, joined with a large numerical capacity (See signs *of Computationumericality).*



Temporimechanicality Small—A Chinese girl.



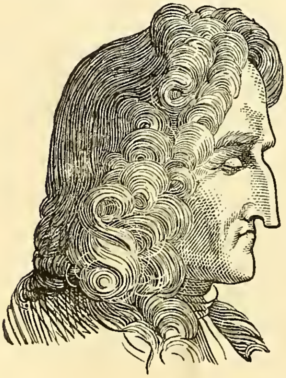
Temporimechanicality Large—The Duke of Wellington. Taken from a bust in the Gallery of Art in Edinburgh.

Mechanical time is the result of the blending of two faculties, which produce a new faculty. A slight predominance of bony structure gives the mechanical element, and the round or circular form gives the quality of time. The conjunction of the two is termed Temporimechanicality—a faculty of the highest usefulness to the possessor.

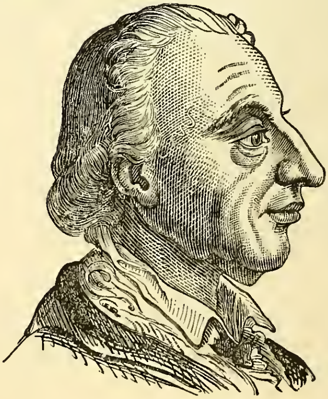
PRACTICALITIVENESS.—PRACTICALITY.

THE QUALITY OF BEING PRACTICAL, MAKING A GOOD USE OF EVERYTHING.

Receding foreheads are never found except on persons of great PRACTICAL INCLINATIONS. *Dr. John Hunter, whose genius, cultivated taste, and profound research have placed him among the most eminent philosophers and scholars of his time, had a low, receding forehead. He remarked that his first consideration of a subject was in regard to its practical usefulness, and that, if considered impractical, he abandoned it for ever.*



Practicalitiveness Small — Thomas D'Urfey, a facetious and impractical English poet.



Practicalitiveness Large—C. M. Wieland, an elegant and learned writer and poet of Germany.

The brain being that part of the frame which denotes the capacity for sensation, it follows that that part nearest the visual organs would shew the strength of the sensations most nearly connected with the departments of sight or practical life; and thus, by the fulness of the forehead over the eyes, we estimate the degree of approach to the practical form.

REVERENTIALNESS.—REVERENCE.

THE STATE OF AWE, HIGH REGARD, SUBMISSION, AND FELT RESPECT EXHIBITED FOR GOD AND MANKIND.

A low coronal region, and a high superior front head, and eyes which naturally turn upwards on meeting another's gaze, indicate large respect; but when they stare boldly into the eyes of fellow kind, and care not to turn their glance, and when it seems to require effort to do so, it indicates small reverence and no respect.

No part of the human structure acts so obedient and submissive a part as the bony element. It has no wilful motion of its own to prefer to that which it receives and obeys from the other parts of the body. It is set in motion only in obedience to the high behests of muscle, brain, thorax, or abdomen, and while life exists it never refuses to act upon the impulses which are received from these centres of action. Submission and respectful obedience to the will of God or laws of man being the sum and substance of Reverentialness, and the bones being that part of the bodily structure which most strictly embodies that action, we conclude by analogy that a predominance of bone is an indication of the presence of diffidence, dependence, and respectful submission, which cause the eyes to turn upward or away from the rude stare of another. We have powerful auxiliaries to this reasoning in the facts that there are no animals so submissive to man as the large-boned ones, such as the horse, ass, ox, camel, &c.; while, on the other hand, none are more aggressive and less submissive than those of the largely developed Muscular form, such as the lion, tiger, leopard, panther, puma, lynx, rhinoceros, hippopotamus, all of which have muscles in abundance, rounding off every bone in contradistinction to the horse kind, which exhibit the hip and other bones standing out in salient points, and which are generally submissive and obedient to their owners. The feline, with the pachydermatous species already mentioned, display no weak reverence for man, but will savagely stare him in the face, with an impudence and a ferocity which is as much removed from the respectful attitude of the other species, as night is removed from day. We have thus conclusive evidence that the bony form is essentially the form of Reverentialness and respectful submission.

* * *

THE FACULTIES, THEIR SIGNS AND PRINCIPLES.

CLASS V.

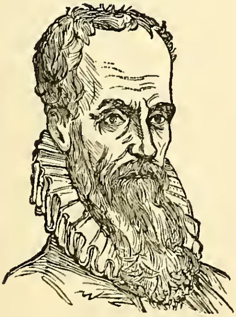
THE ELEVATIVE ENDOWMENTS.

THE ENDOWMENTS OF THIS CLASS ARE LARGE WHEN THE BRAIN AND NERVE FORM PREDOMINATES.

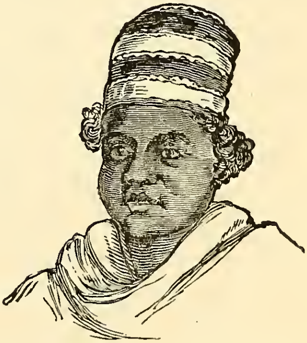
ORDINIMENTALITY.—MENTAL SYSTEM.

THE QUALITY OR ENDOWMENT THAT INCLINES ONE TO ARRANGE AND SYSTEMATIZE THOUGHTS OR IDEAS.

Mental order gives its indication in Physiognomy by a square head and forehead, with a prominent, straight nose.



Ordinimentality Large—Ambrose Pare, the most celebrated of the old French surgeons.



Ordinimentality Small—Ratasse, Prince of Madagascar.

To be capable of arranging and classifying our thoughts and impressions according to system and method, it is absolutely necessary that harmony of arrangement should first exist in our bodily structure; because the mind and body through which those thoughts and impressions require to be elaborated and perfected must stand in harmonious relationship the one with the other, the one being the instrument of the other. A man having an auger wherewith to bore a hole in a piece of wood cannot, by any possibility, accomplish the boring of a hole larger than the diameter of the auger he is using; and in like manner he cannot accomplish anything which his instrument, the body, is incompetent to perform, however much he may yearn and long after greater results. If the structure of the body is arranged with harmony and system, the mind is capable of harmonious and efficient action, in proportion to the extent to which these qualities are developed in his body, and no further. If the bodily structure is deficient in these desiderata, it is idle to strive after anything not in accordance with this deficiency of structure.

PRESCIENCE.

THE FACULTY THAT ANTICIPATES AND GIVES KNOWLEDGE OF EVENTS BEFORE THEY TAKE PLACE.

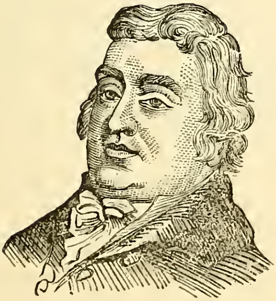
Prescience is most readily discovered by its producing a dreamy eye, and bending the entire body forwards, immediately at the armpits.

Prescience is the faculty of arriving at accurate conclusions regarding the events looming in the future. The dreamy eye indicates the disposition to gaze inquiringly into the future, and as in those cases the waking dreams are generally about as shadowy and evanescent as the visions superinduced by sleep, a protracted waking indulgence in reverie ultimately gives a permanent dreamy expression to the eye. Another indication of a propensity for peering into the future, is the form bent forward from the armpits upwards, as if to advance that part of the body in the direction to which the thoughts are continually tending; and this position is assumed quite as naturally as that assumed by trees, in obedience to the breezes with which they are fanned. The mind being the master and controller of the body, the latter may be warped by the former into any position by continuance and recurrence of action in one direction. Men who attain a weight of years in the incessant contemplation of things to come invariably assume this posture of anticipation in advance.

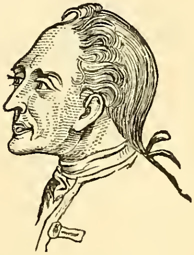
SUSCEPTIBLENESS.

SUSCEPTIBILITY OF BEING INFLUENCED BY SURROUNDINGS.

Large eyes, sharp features, quick step, with sudden movements of the head, indicate an excitable nature.



Susceptibleness Small — Charles James Fox, a distinguished English statesman and orator.



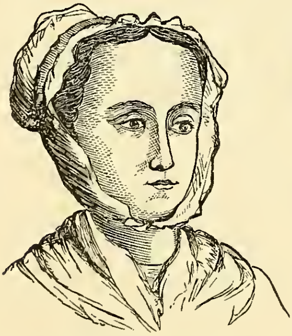
Susceptibleness Large—John Elwes, a miser of London, who died worth half a million sterling.

A large Brain and highly developed Nerve form are indispensable to a high degree of susceptibility, because these are the seats of the higher powers of sensation, without which it is impossible to be to any great extent susceptible to external influences, and it is necessary also to have the Bone form large and angular in shape, so as to produce a framework angular and easily excited.

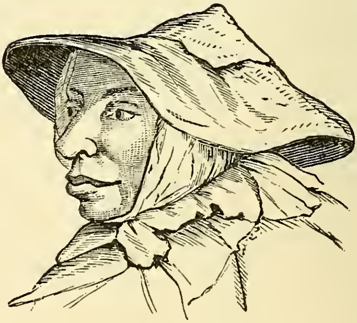
MENTIMITATIVENESS.—MENTAL IMITATION.

THE POWER THAT COPIES MENTAL EFFORTS.

Superior width across the top of the forehead, when compared with the rest of the face, can safely be considered an indication that that person desires to copy, and is capable of IMITATING the INTELLECTUAL and worthy efforts of others.



Mentimitativeness Large—
Elizabeth Canning.



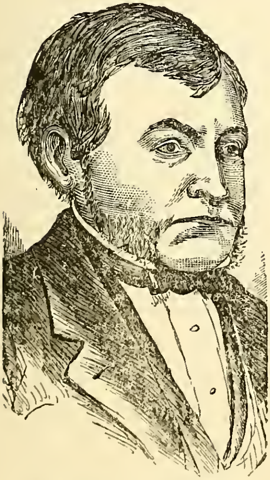
Mentimitativeness Small —
Mary Squires, the gipsy.

To estimate the capacity of power of sensation, we take the width and size of the brain in its upper part as compared to the remaining facial development of the individual, and as it is impossible to imitate a thought unless we have the powers of receiving a vivid impression of it, those who have a large development of the form indicated above, alone have the power in any great degree of imitating thought.

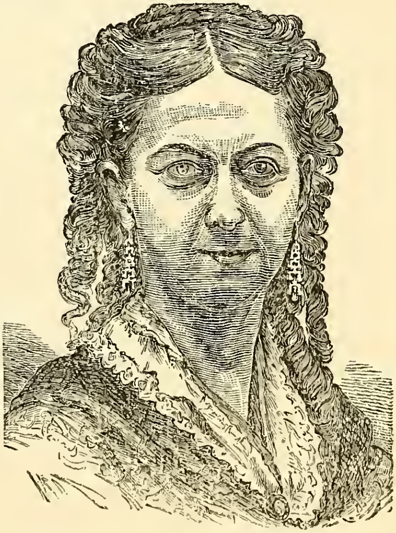
AFFABLENESS.

COMPLACENCY OF DISPOSITION WITH THE NATURAL CONSEQUENCES, INVITING MANNERS, WITH EASE AND ELEGANCE IN CONVERSATION.

A long thin neck in mankind will ever testify as indicative of AFFABILITY; while a short-necked person will care little for grace or affability of manners.



Affableness Small—Rulof, hung at Binghamton for murder in 1871.



Affableness Large—Mrs. Josephine A. Prosch, a talented elocutionist of the city of New York.

Affability is a desire to be pleasing to others, with the view of producing in them a like state of feeling, and so contributing to the enjoyment of the first by the reflex action of his own affability. Self-sufficient and independent people have short necks as the outward sign of their deficiency in affability, and by reason of this they are not prone to bowing or rendering themselves agreeable by demonstration of this kind; while on the other, those of an opposite disposition are furnished with longer necks, which naturally adapt them for obeisance and submission in the presence of others.

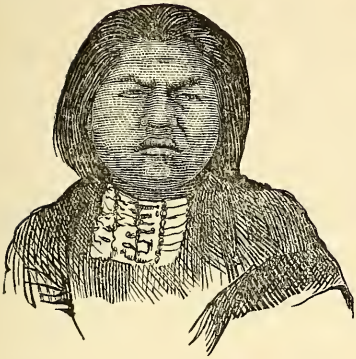
SALITIVENESS.—WIT.

THE POWER OF SEIZING ON THOUGHTS AND OCCURRENCES AND PRESENTING THEM IN A LAUGHABLE MANNER, CHIEFLY DEPENDING ON QUICKNESS OF FANCY.

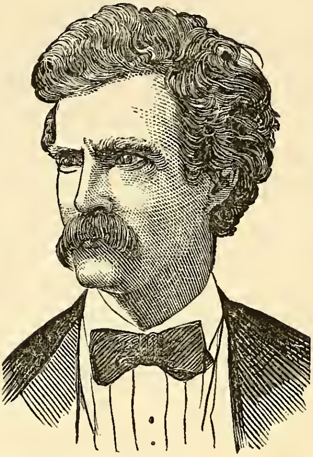
> "True wit is nature to advantage dressed;
> What oft was thought, but ne'er so well expressed."

A face very wide in the upper portion, and tapering downwards like an inverted pear or pyriform, always denotes the very witty person, provided the health is good and no bad habits exhaust the vitality.

The face of expansive width in its upper, and narrowing proportions in its lower hemisphere, shews the predominance of vivid sensations, which are forced by natural pressure, and with increasing vivacity downward to find an outlet at the mouth, or still farther downwards through the arm and hand to the pen. Those condensed currents comprise the thing we call wit, and the happy and joyous surprises which its exercise affords in others is only the reflection of the vivid reality having its origin within ourselves.



Salitiveness Small—Ute Indian, of Salt Lake, as witless as a dry stump.



Salitiveness Large — Mark Twain, author of "Innocents Abroad," and several other amusing works.

SUBLIMITASITY.—ADMIRATION OF THE SUBLIME.

THE EXPANSIVE SWELLING OF THE SOUL THAT APPRECIATES THE ELEVATED GRANDEUR OF NATURE AS WELL AS THE ELEVATING, LOFTY EXPRESSION OF THOUGHT AND FEELING. "ALL THAT EXPANDS THE SPIRIT YET APPALS."

This quality or faculty of the mind largely abounds in a fine organization in which the upper portion of the face is larger and wider than the lower. Also the towering form, if well cultivated mentally, indicates nobleness of character.

Alone of all the animal kingdom man maintains a posture erect and towering to heaven; and he alone is capable of lofty aspirations and of ennobling contemplation. Arguing *a priori*, we naturally conclude that the form which is large in the upper portion and relatively small below, is the most capable of dwelling upon the more exalted themes, and of rearing his soul upwards free from the grossness of material existence; and by the same reasoning we find, that where a man is formed upon the opposite plan with his richest development in the grosser portion of his body, his character is upon a par with the structure of his body. Like the hog, which he resembles in form, his mind never soars far above the gratification of his selfish desires. The grossness of his body seems to crush out and annihilate anything better that would else take root, and by continued and close association with the mere interests of vulgar matter, the body ultimately becomes the envelope of a grovelling mind, alike dead to decency and worthy ambition.

FUTURITIVENESS.—DESIRE FOR FUTURE LIFE.

THE DESIRE OF A FUTURE LIFE.

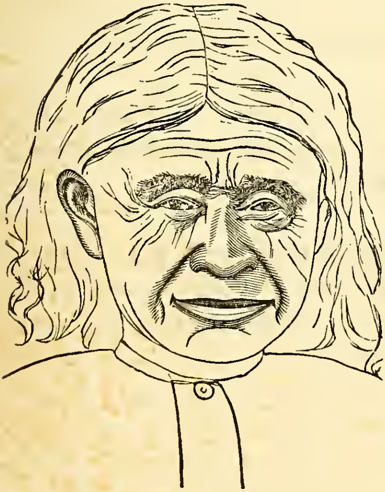
The stooping form, thin chest, wide and high top head and upper face, narrow superior and inferior maxillaries or jaws, thin and well-defined nose, and a thin ear, are palpable indications of a desire for future life.

As many are floating down the dim stream of the future before us, with vague and fear-laden notions of the hereafter to come, when we have shot the cataract of death, the thoughts of many of us are irresistibly riveted on the shadowy confines of "that bourne whence no travellers return," but to which we all are hastening. A constant turning of our thoughts in advance of time, quite naturally has the effect on the upper part of the body of making it incline permanently to an advance of position, and as it stoops forward and the thoughts ascend, the top of the head and the upper part of the face widen out, while the lower part becomes narrowed down; and it would appear that purity of thought has the effect of purifying and thinning the features as if by the extrusion of the grosser ingredients.

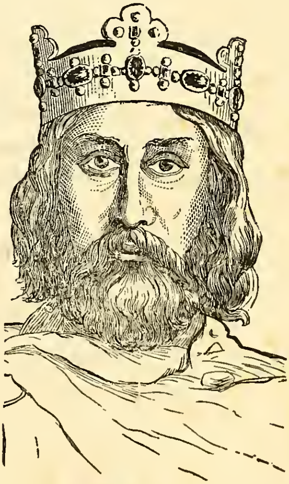
ÆSTHETICALNESS.—APPRECIATION OF THE BEAUTIFUL.

THE APPRECIATION OF THE BEAUTIFUL IN NATURE AND ART, AS THE RESULT OF THE POSSESSION OF THE ÆSTHETIC FACULTY.

A high or prominent nose is nature's evidence of a love and appreciation of the beautiful.



Æstheticalness Small—Kettle, a selfish and cunning Indian Chief, of Washington Ter.



Æstheticalness Large—Charlemagne, a great warrior, and zealous promoter of the sciences and the arts.

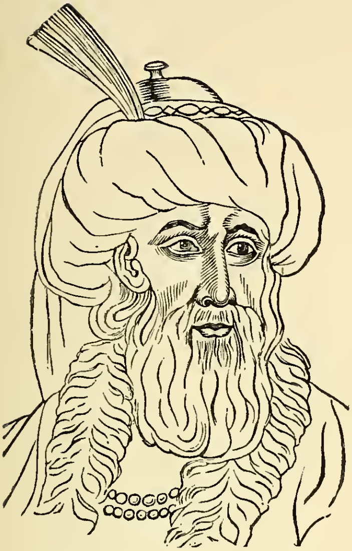
Love of the beautiful is a rising of the mind above the region of common-place and common-looking or vulgar things, and soaring into a contemplation of the beautiful, whether to be found in material objects or in the brighter emanations of the higher conceptions of the individual. The capacity for rising above the common order of things is evidenced outwardly by a somewhat high development of the nasal organ rising well out from the general plane of the face, and this being the evidence of the possession of strong power of sensation, we have the fundamental reason of large Æstheticalness

CAREFULNESS.

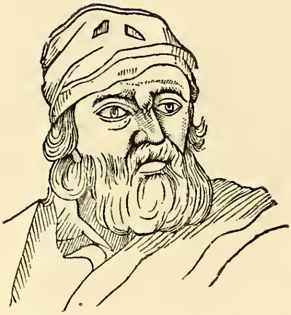
SOLICITOUSNESS, GUARDEDNESS, WARINESS, AND CIRCUMSPECTION IN ALL THE TRANSACTIONS OF LIFE.

The palpable manifestation of caution is a long nose. The elephant is the best example of this, as his nose extends to the extreme end of his trunk.

The immediate function of the nose being to protect the mouth, lungs, stomach, &c., from foulness, rancidity, or other elements of danger arising from gases or putridity; and being constantly in the exercise of the greatest of care and watchfulness for arriving at the requisite conclusions, we may predicate from the length of the nose, which will also give the extent of surface on which the olfactory nerve has to act, and the degree of efficiency which accompanies the performance of its functions, the extent of the development in the individual of the faculty of Carefulness.



Carefulness Large—Flavius Josephus, an eminent and illustrious Jewish Historian, who was an exceedingly careful and correct author.



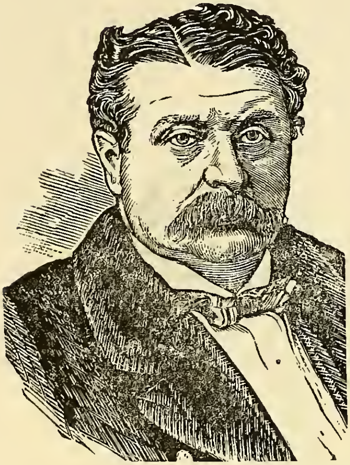
Carefulness Small—Thomas Hudson, a very careless man, who was ever blundering into misfortunes.

SPEMENTALITY.—SPIRITUAL HOPE.

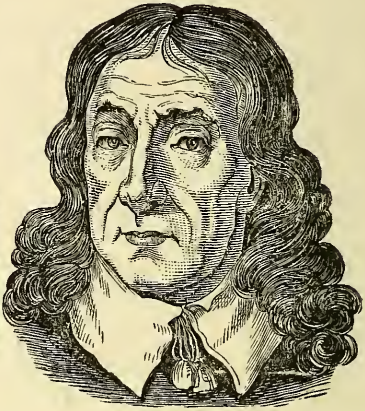
THE FACULTY THAT DESIRES SOME MENTAL OR SPIRITUAL GOOD.

Spiritual hope may be known as large when we see a large open eye and high forehead, with great comparative measurement from the point of the nose to the hair of the forehead.

If the relative measurement of the face announces the undue development of any part of it, we may accept the fact as evidence of the undue growth and power of a particular desire, according to the particular part shewn by measurement to be unduly proportioned. Spementality or mental hope being simply the sensation of desire after a future life, and the high spiritual welfare of humanity, and the power of sensation being always in full accord with the size of the brain and nerves, whose exclusive offices are to receive sensations, it follows that a high forehead, being the index of large development of brain, must indicate the amount of spiritual hope, or in other words, the amount of desire after mental and elevating sensation. Large comparative measurement from the point of the nose to the beginning of the growth of the hair on the upper part of the forehead is another indication of the faculty under treatment, because, in addition to the brain, it includes great length of nose, having for its office the special sense of smell. A large eye is always indicative of the presence of the faculty, because it denotes largeness



Spementality Small—James Fisk, Jr., of Erie Railroad notoriety.



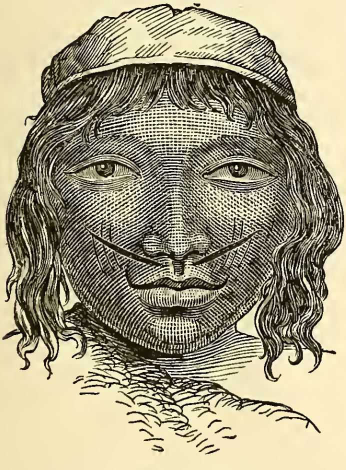
Spementality Large—John Milton, an illustrious English poet.

of the optic nerve, in which there resides great capability of sensation, and they are all usually in harmony with desires of a sensational nature.

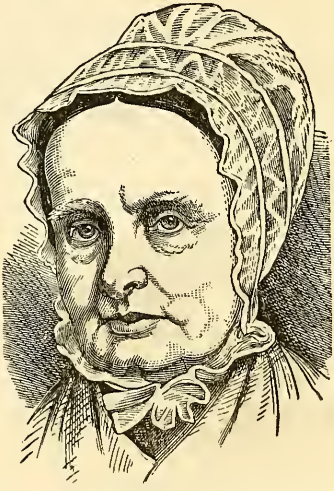
PURITATIVENESS.—PURITY.

THE VIRTUE OF CHASTITY AND INNOCENCE UNDEFILED.

A clear, bright eye, a broad, high forehead, evenly developed lips, with a refined and intelligent countenance, are some of the signs of purity of mind.



Puritativeness Small—A Patagonian.



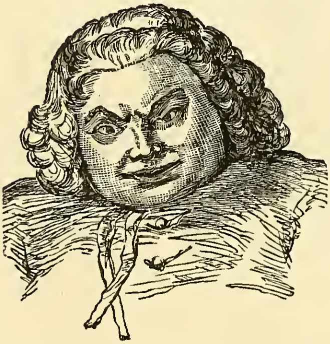
Puritativeness Large—Lucretia Mott, a Quakeress preacher.

Like all other variations of character, purity of mind is faithfully imaged on the exterior of the body, and that with no less exactitude than is a material object reflected upon the surface of a good glass. The mirror cannot possibly reflect any object which does not occupy the requisite fronting relationship to it; and equally impossible is it for the facial mirror to reflect faculties which have not their abode within. The faculties permeate through every particle and fibre of the body, and wherever purity of mind exists, it must perforce make patent its existence by means of its allotted facial peculiarity; and as purity of mind consists in those things which have a tendency to enlighten and ennoble, the outward effect will be an expansion of the forehead, and the overspreading of a "spirituelle" expression throughout the entire countenance.

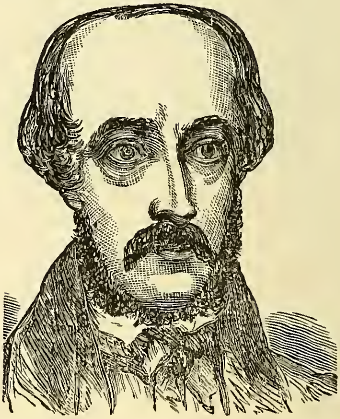
INTUITIVENESS.—INTUITION.

CONSCIOUS KNOWLEDGE PRIOR TO EXPERIENCE.

The signs of the FACULTY OF INTUITION are a high forehead, with large, open eyes.



Intuitiveness Small—Simon Fraser Lovat, a Scottish chieftain and rebel, who was beheaded.



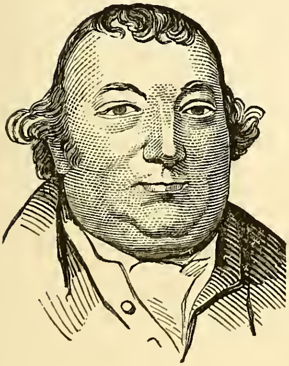
Intuitiveness Large — Giuseppe Mazzini, a talented Italian patriot.

The faculty of arriving at a seemingly instantaneous recognition of truth without ratiocination, or, at all events, without a degree of ratiocination large enough to be capable of appreciation, must have its abode in the sensational parts (Brain and Nerves of sensation) of our nature, as these alone are equal to approximately instantaneous acts, and it is therefore in the forehead that we must look for the development of high sensational susceptibilities or powers. A large and open eye is indicative of largeness of the optic nerve, which in its turn demonstrates a high development of the Nerves of sensation upon which this faculty depends, and with which it is immediately associated.

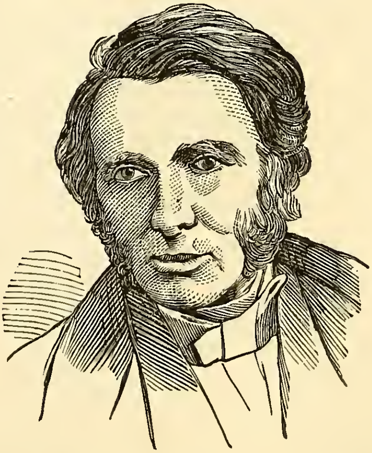
LITERATIVENESS.—WRITTEN LANGUAGE.

THE SKILL OF PRODUCING WRITTEN LANGUAGE.

A full broad high forehead, with a pyriform face, are signs of excellence in written language.



Literativeness Small—Mr. Thomas Rogerson, a very poor writer.



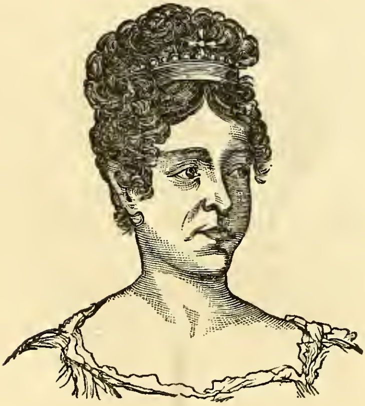
Literativeness Large—John Ruskin, a brilliant author and art critic.

A full high forehead, with a pyriform face, shew love of, and ability for, literary writing, when these are accompanied with education. Vivid and strong sensations are necessary to the success of a writer, and these are indicated by the broad high forehead which denote intellectual imitation. The presence of these qualities are also indicated by width in the front top of the head (see signs of Mentimitativeness). These structural provisos being granted, Education and experience are alone required to produce an able and accomplished literary writer.

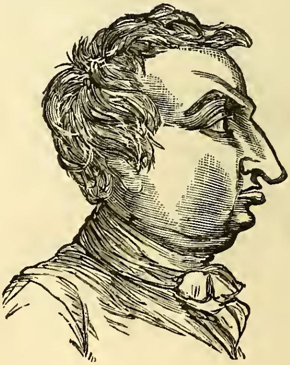
CLEANNESS.

THE DESIRE TO BE FREE FROM FOULNESS AND IMPURITIES.

Fine hair, as in the rabbit, is a sure sign of NEATNESS; while coarse hair, as in the hog, may be known as nature's testimonial of a dirty animal.



Cleanness Large—The Duchess of Kent, the mother of Her Majesty, Queen Victoria, The Noble Queen.



Cleanness Small — Nathaniel Bently, the dirtiest man in England.

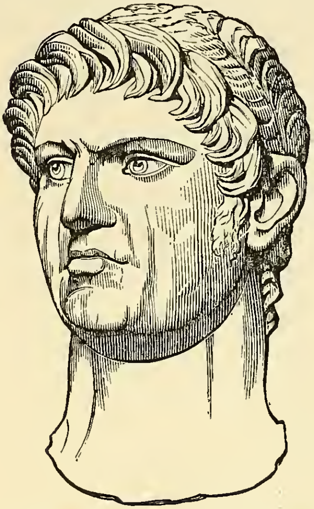
Cleanness. Dirt has been well expressed as "very ordinary matter in the wrong place," and such it is when it is allowed to accumulate on the person or on the clothing. Where there exists a high organization, the individual—be he man or animal—is endowed with a greater or less elevation of nature, and in virtue of this he recoils from the useless contact with inorganic matter, or organic matter of a very low type. This feeling springs from the natural law which attracts like to like. On the other hand, where the organization of the individual is of a low type, as evinced by coarse hair, skin, &c., there is no great revulsion against close association with dirt, because there is a large proportion of the grosser materials in the composition of his frame, in comparison with the amount of soul he is able to boast of. The hog being essentially coarse in his structure with little of the spiritual essence in his composition, lives uncaring and contented surrounded by filth and dirt. The dainty rabbit, on the other hand, having fine downy hair and a highly nervous form, is miserable unless allowed to perform regular ablutions and keep itself thoroughly free from the hateful dirt.

PITIFULNESS.

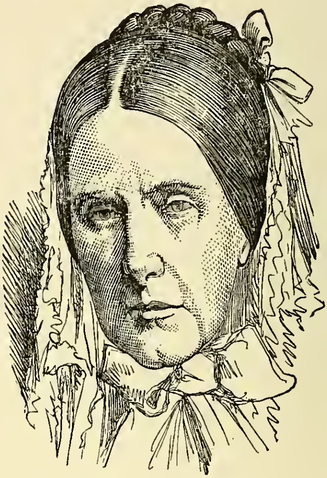
TENDERNESS AND COMPASSION FOR SUFFERING MANKIND, THE LOWER ANIMALS, AND EVERY LIVING CREATURE.

An eye that looks upon an object with lingering softness, is an evidence of large PITY. *When this quality is strong it bows the head forwards, and softens the manners.*

The essence of the action of pity is a softening of the higher feelings, and a melting of the virility of the individual upon whose soul the angel-like influence is at work The eyes, quickly responsive to the mysterious pleading that wells up from its compassionate depths, become eloquent in nature's language, and advocates the cause which is thrilling throughout the inmost recesses of the frame. This is only the operation of the great natural law which ordains that mind must control matter, and in this case an outlet of manifestation is found in the eyes, which are ever the most active in the cause of pain and suffering.



Pitifulness very Small—Nero, one of the most cruel Emperors of Rome. Copied from the bust in the British Museum.



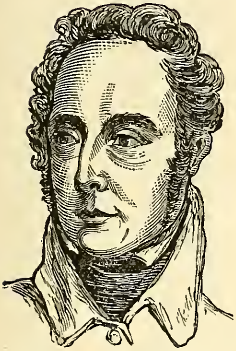
Pitifulness very Large—Miss Coutts, of London, England, the most compassionate lady of the present age.

IMAGINATIVENESS.

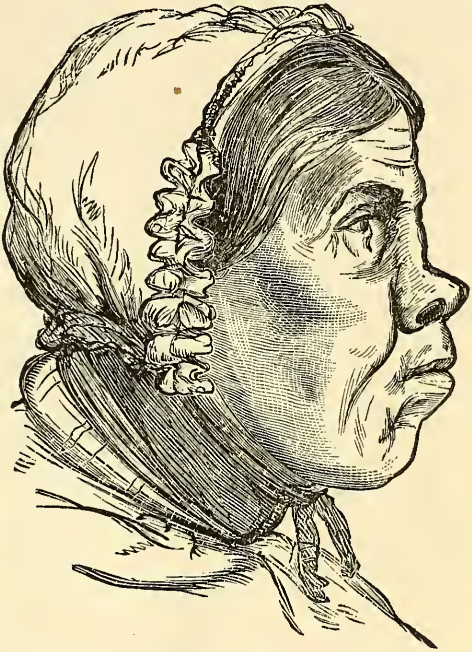
THE PLASTIC POWER OR FACULTY OF CREATING IMAGES IN THE MIND, THE HOME OF FANCY.

Remarkable intelligence evinced by facial expression denotes vivid imagination

This faculty is born of largeness of Brain form, as compared with the other proportions, and it indicates the capacity for superior sensations. Imagination is simply this power of sensation developed in an extraordinary degree, and this subtle power acts directly from an elevating cast of Brain upon every part of the face, in expressions of intelligence and refinement, which are the outcome of a highly sensational organization.



Imaginativeness Large—**Lamartine**, a celebrated French poet **and** historian.

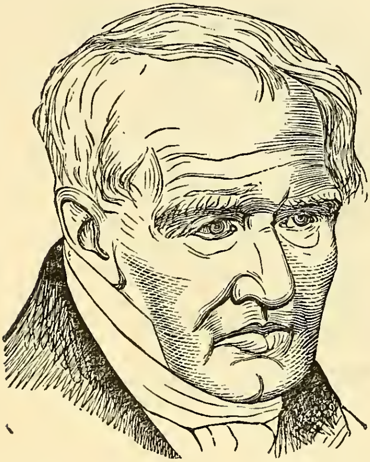


Imaginativeness Small—A babbler, an ignorant Irish woman of Edinburgh.

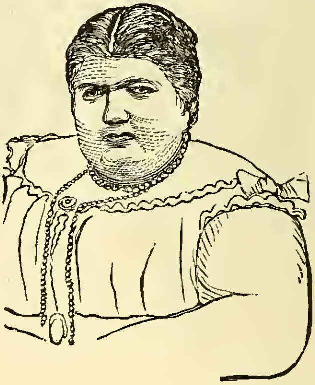
FACTIMEMORIATIVENESS.—MEMORY OF FACTS.

THE FACULTY OF RETAINING PREVIOUSLY ATTAINED KNOWLEDGE.

Memory of incidents and general affairs manifests itself by general fulness of the forehead.



Factimemoriativeness Large—Frederick H. A. Baron von Humboldt, a distinguished German philosopher and traveller



Factimemoriativeness Small—Miss Catherine Dunn, whose weight is 425 pounds.

The reception of facts is accompanied by sensation of a more or less intense character, according to the amount of interest for the hearer, which each particular fact bears with it: and as the more intense sensations are those which grave the deepest mark upon the mind, and are most enduring in consequence, and most readily recalled; it is clear that to determine the capacity of any individual for receiving and storing up impressions and facts, we must examine the front portion of the brain as that is the region assigned to the sensations, while the back part contains the Nerves which regulate the motary powers. It is therefore in the front part of the forehead that we must expect to find the material for estimating the comparative activity of this faculty.

Under this faculty we introduce numerous accounts of remarkable facilities of recollection, interspersed with advice regarding the care, cultivation, and improvement of the memory. After retiring to rest every night, think over all the transactions and incidents of the preceding day; read the works of Cuvier, Leibnitz, Göethe, Humboldt, Lyell, Agassiz, Liebig, Sir Walter Scott, Prescott, Alison, Macaulay, as well as other scientific and historical writers, and at least once every day repeat all the events of importance which have transpired during the last twenty-four hours, and business negociations, as well as every ordinary incident of life. Commit condensed portions of history to memory; impress all leading incidents firmly on the mind, by giving intense and concentrated attention to them when they come to your notice; associate much with those of superior memories. Employ the memory, and it will give you retentive power. The Greeks continually exercised their memories by treasuring in their minds the works of their poets, the instructions of their philosophers, and the problems of their mathematicians; and such practice gave them vast power of retention. Pliny informs us of a Greek called Charmidas, who could repeat from memory the contents of a large library. One should write out every speech or whatever it is desired to retain. This practice is recommended by Cicero and Quintilian. Memory is facilitated by regular order and distributive arrangement of facts, and by conversing on the subjects you wish to remember. Themistocles, Cæsar, Cicero, and Seneca were possessed of very great memories. Themistocles mastered the Persian language in one year, and could call by their names all the citizens of Athens, when its population was 20,000. Cyrus knew the name of every soldier in his army. Julius Cæsar was able to dictate to three secretaries at the same time, and on perfectly distinct subjects. Portius Latro, as Seneca informs us, remembered everything that he committed to writing, and wrote very rapidly. Hortentius attended a public sale, which occupied the whole day, and gave a full and particular account in the evening, from memory, of every article that was sold, as well as the name of each article, with the name of the purchaser, and when compared with the notes of a clerk, it was found perfectly correct.

Themistocles possessed such powers of retention, that when one offered to teach him the art of memory he rejected the proposal, and remarked that he had "much rather he would teach him the art to forget." Justus Lipsius was able to repeat every line of Tacitus' Works *memoriter.* Josephus Scaliger committed Homer's *Iliad* and his *Odyssey* entirely in twenty-one days, each being about the same length, the *Iliad* containing 31,670 verses. Seneca could repeat 2,000 names in the order in which he heard them, and rehearse 200 verses on different subjects after once hearing them read. Mithridates, the celebrated King of Pontus, ruled twenty-two countries, and was enabled by his faithful memory to converse with the various ambassadors in the proper language of the countries which they respectively represented. St Austin's Works are sufficient to fill a large library, and yet Dr. Reynolds mastered them all, being able to repeat any portion of them from memory. Dr. Jewel, Bishop of Salisbury, could repeat anything he had written by once reading it, and never forgot a line of what he read; but his astonishing memory he attributed to industrious cultivation of that faculty.

Jerome, of Prague, who was martyred for the Protestant religion by a sentence of the Council of Constance, was famous for an excellent memory, of which Poggius, in his Epistle to Leonardus Aretinus, gives the following occurrence in illustration:—"After he had been confined 340 days in the bottom of a loathsome tower, where he was wholly without light either to see or read; yet, when he was called to trial, he quoted so many testimonies of the most sagacious and learned men in favour of his own principles, as if all that time he had been immured in a good library, with all the conveniences of studying." This is a remarkable example, especially if we consider the afflictive circumstances of his case, and how sadly trouble weakens and impairs the memory. A young Corsican, while in the law school of Padua, in Italy, could repeat forwards or backwards 36,000 names, and a year after, could repeat anything remembered. He instructed Franciscus Molinus, a nobleman of Venice, who had a very poor memory, in less than eight days, to repeat 500 names in any order he pleased. Mr. Thomas Fuller possessed a memory sufficient to remember all the signs on both sides of Cheapside and several other streets in London. Instances could be related of other memorists, equally noted, but the limited space of this book will not permit an extensive article on this subject. Sickness, fright, or slothfulness may seriously impair the memory, as the following instances may shew—viz., the orator Messala Corvinus forgot his own name—caused by sickness. Artemidorous, the grammarian, having been frightened by a crocodile, the fright caused an entire loss of his learning that he never afterwards recovered. Calvisius Sabinus, from the habit of slothfulness and neglect of his memory, became so forgetful that he could not recollect the names of Ulysses, Achilles, and Priamus, yet he knew those men as well as one man can well know another. Germanus, who was a clerk under the reign of Frederick II., having been bled, lost the entire use of his memory, yet one year subsequently having been bled again, he recovered the full use of his former memory. Many examples could be enumerated, wherein forgetfulness could be attributed to the fact of not cultivating and properly employing the memory.

The mathematician, Wallis, while in bed, and with his eyes shut, extracted the cube root of a number consisting of thirty figures, not making a single mistake. Dr. Timothy Dwight, of Yale College, was in the habit of taking seven texts, and at the same time dictating to seven amanuenses seven distinct sermons. A celebrated London dramatist laid a wager that he would, after once reading a page of advertisements in the *Times*, repeat them *verbatim* and in order; and he won the wager. He also undertook to walk along one of the main business thoroughfares, the Strand, in which every house on each side has an elaborate signboard and number, and to repeat the names, numbers, and businesses of each, taking in both sides, as he walked along only once. Mr. Miller, a talented lawyer of Keokuk, Iowa, who was formerly member of Congress, has a remarkably retentive memory. He has been known to write out in full an entire sermon, without taking notes; and when the bishop who preached it called upon him and observed that Mr. Miller had changed only one word, in reply, he mentioned the very word, and gave as his reason for the change, that the word used by the bishop was incorrect. The bishop thanked him, and pocketed the paper in which the reported sermon appeared, the morning after it was delivered. Mr. Miller remarked to me that it was by his concentrated and earnest attention at the time of hearing, that he was enabled so unfailingly to remember. A Miss Foster, of London, has also this remarkable retention of memory. A clergyman, of local note for his terse, epigrammatic style of sermonizing, was asked by his congregation to print and publish one of his telling, cogent discourses;

but on his assuring them that he could not reproduce accurately what he had preached, Miss Foster, then about sixteen years of age, proffered to write it out *verbatim*, and did perfectly to the preacher's satisfaction. Dudley Waller, a boy in the American States, when entering his teens, learned long lectures by hearing them read once or twice. He has been known to repeat accurately half a newspaper column, and tell where the punctuation points appeared, as he had been told them when hearing it read. Writing out one's thoughts gives tenacity to the memory. Then write out your own thoughts, as well as what you learn from books, teachers, and conversation. Keep a diary or note-book, and at the end of the day note down in chronological order every transaction that occurred within your cognizance during the whole day.

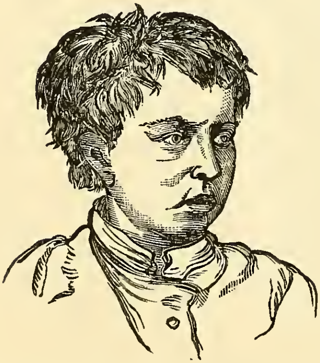
Special care should be taken, however, in the exercise and cultivation of memory, not to overtax it. It is a fact, well attested by experience, that the memory may be seriously injured by pressing upon it too hardly and continuously in early life. Whatever theory we hold as to this great and wonderful function of our nature, it is certain that its powers are only gradually developed; and that, if forced into premature exercise, they are impaired by the effort. A regulated exercise, short of fatigue, is improving to it; but we ought carefully to refrain from goading it by constant and laborious efforts in early life, and before this wonderful, godlike faculty is strengthened to its work, or it decays in our hands.

The following interesting incident, related by James Beaty, may serve as a warning to those having the care of the young. A boy, whose over-zealous and indiscreet mother obliged him to commit sermons to memory, lost his other faculties and became stupid and idiotic. Let us ever keep in mind what *Coleridge*, in his rapturous appreciation of this power, exclaims,—"Memory, bosom-spring of joy." Then *Basile*,—"Memory is the cabinet of imagination, the treasury of reason, the registry of conscience, and the council-chamber of thought."

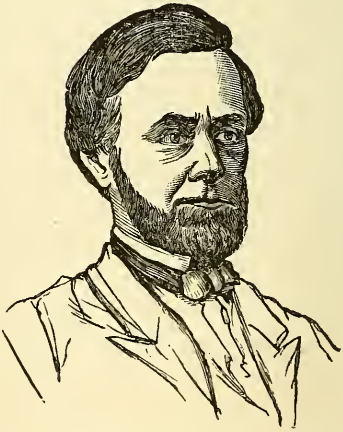
PRUDENTIALITY.

WISDOM APPLIED TO PRACTICE

PRUDENTIALITY partially closes the eyes, which are usually also found somewhat settled in the head, but it is wanting in persons with very short noses Hence children, who almost invariably have short noses, are very imprudent. Open mouths are also evidence of natural imprudence.



Prudentiality Small—A restless, loquacious, ignorant, and saucy boy of Jacksonville, Illinois.



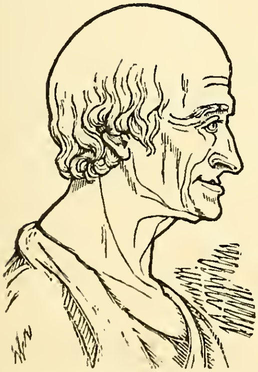
Prudentiality Large—John Sherman, U.S. senator from Ohio.

A fulness of practical wisdom or prudence, gathered during the course of a lifetime, will, in old age, when caution and prudence become the first. if not the only consideration, cause the eyes to settle back in the head, long practice and experience having taught them that in this position there is greater convenience for thinking; thinking cautiously and carefully carried to its ultimate results being prudence itself. The position has been adopted first, from an instinctive sense of fitness and convenience, and it has become permanently fixed by the natural law of use and wont.

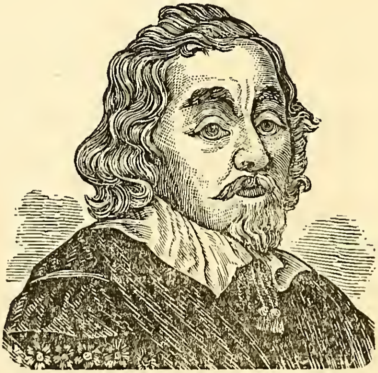
CREDULOUSNESS.

THE ENDOWNENT WHEREBY ONE IS ENABLED TO RECEIVE AS TRUE THAT WHICH IS UNPROVEN.

The eyebrows, when elevated far above the eyes, and present a large interciliary space, as in Harvey, are certain signs of large faith.



Credulousness Small—Voltaire, who had no respect for God or man, and tried to destroy all religious faith.



Credulousness Large - Wm. Harvey, M. D , who published his discovery of the circulation of the blood in 1628.

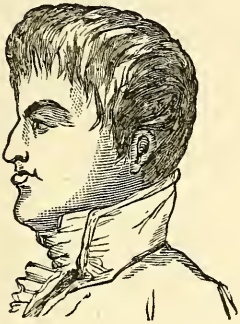
Credulous people take for granted the truth or accuracy of any statement that may be put before them, being quite incapable, it would appear, of separating the wheat from the chaff, and the probable from the improbable. This easiness of reception for all and sundry must arise from the undue openness of the avenues which conduct the information to the sensorium. Those avenues of reception are the eyes, the ears, the nose, the mouth, and the nerves of sensation. When the eyes are well open, the brows will be drawn well up on to the forehead, there being no other way of admitting of the open gaze. The ears are capacious, and seem to turn their tips forwards, as if to be prepared to receive and adopt anything, however strange, that may be addressed to them. The nose is furnished with expanding nostrils, and admits everything without much scrutiny as to quantity or quality; the mouth stands agape and mutely asks for more; the head is large in the front part where lie the powers of the sensation, and the whole is the well-known picture of a superlatively credulous person.

COURTEOUSNESS.

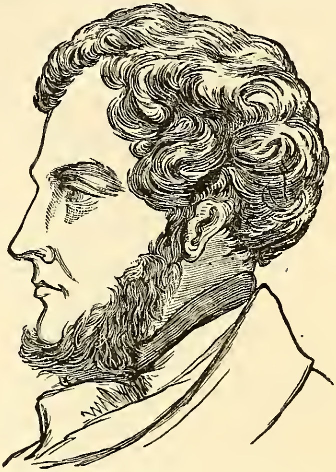
THE STATE OR QUALITY WHICH LEADS TO CIVILITY OF MANNERS, POLITENESS, AND ELEGANT DEPORTMENT.

This winning power of outward attractiveness manifests itself in fine features, high open forehead, graceful form, and a large, animated, and prominent eye.

It is impossible to carry a courteous and conciliatory bearing if the individual has a tendency in any direction to extremity of form. He must be capable of being "all things to all men," and for this purpose it is necessary that he be constructed on a medium plan, and with no rough or abrupt corners in his character which might mar his attempts at courtesy. He must occupy this medium stand-point, and, at the same time, be endowed with sufficient elasticity to admit of his meeting half-way the denizens of either extreme; for if built on an extreme himself, he could not possibly deal with those so far away as the opposite end of the range. The signs given above are those denoting mediocrity of character, and consequently the ability of courteousness



Courteousness Small—D. Fernando VII., a tyrant, who started the Inquisition, and was devoid of fine feelings.



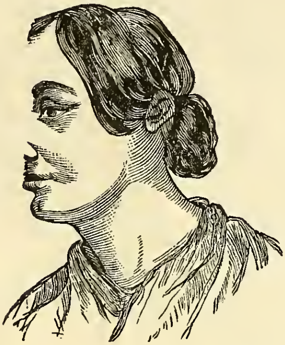
Courteousness Large — Count D' Orsay, the most polite man of the world.

ATTENTIVENESS.

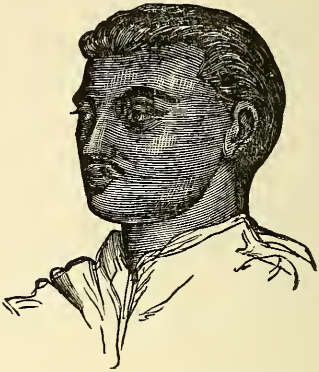
THE QUALITY OR POWER OF GIVING HEED TO OBJECTS OR THOUGHTS.

ATTENTIVENESS when large, carries the head forward in the same manner that one bends forward when thoroughly interested in a new book, held in the hand, as shewn in the engraving of Hugh Miller, Scotland's talented Geologist.

The exercise of attention naturally inclines us to bend forward the visual organs in the direction of the object we are desirous of examining. This instinctive act carries the head, with its group of sensations, into closer proximity to the object, as if instinctive reason had concluded that greater proximity would enhance the observing and noting capacity; and, therefore, like the sunflower which lovingly follows the sun for the rays which keep it in life, the head is projected to the object of attention for greater inspiration there.



Attentiveness Large—Abbey Kelley Foster, an able advocate of the abolition of American slavery.



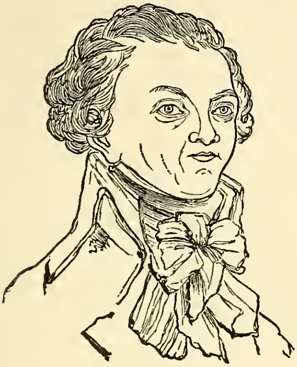
Attentiveness Small—His Majesty Pomare, King of Taheite.

SYMPATHETICALNESS.—SYMPATHY.

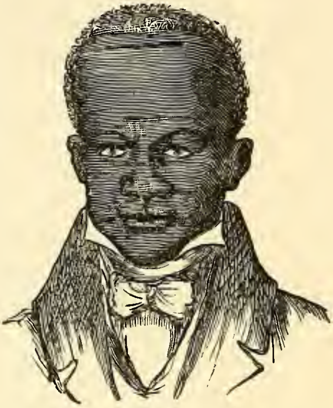
THE VIRTUE WHICH AFFORDS FELLOW FEELING FOR THE WOES, TROUBLES, AND ANXIETIES OF OTHERS, AS WELL AS FOR THEIR JOYS AND PLEASURES.

A long narrow face, with full lips, are testimonies of true and heart-stirring SYMPATHY. *But besides these there are several other signs, such as a long head, from forehead to crown; long and slim fingers, &c.*

To enter into and make our own the joys and sorrows of others, requires subtle powers of sensation to enable us to analyze and understand the feelings of others, and the presence of this high power of sensation is indicated by largeness in the upper front of the head. After arriving at a correct estimation of the feelings of others, a fine-grained organization is absolutely necessary before we can sympathize with, and appropriate those feelings. All the finer feelings, as pity, purity, cleanliness, love of the beautiful and the sublime, &c., depend for their existence upon the fineness of the individualized material.



Sympatheticalness Small—Robespierre, an implacable, sanguinolent, and traculent tyrant.



Sympatheticalness Large – Eustache, who saved his master and others from massacre.

* * *

THE FACULTIES, THEIR SIGNS AND PRINCIPLES.

CLASS VI.

THE PERFECTIVE QUALITIES.

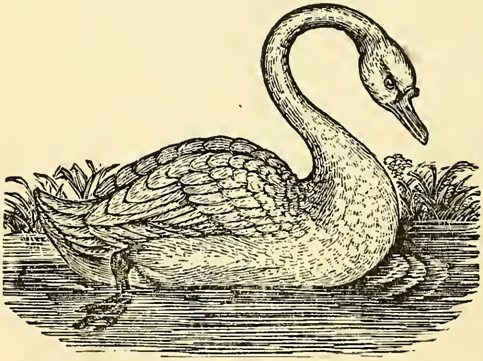
THE QUALITIES OF CLASS SIXTH ACCOMPANY AN EVEN COMBINATION OF TWO OR MORE OF THE FIVE FORMS.

* * *

GRACEFULNESS.

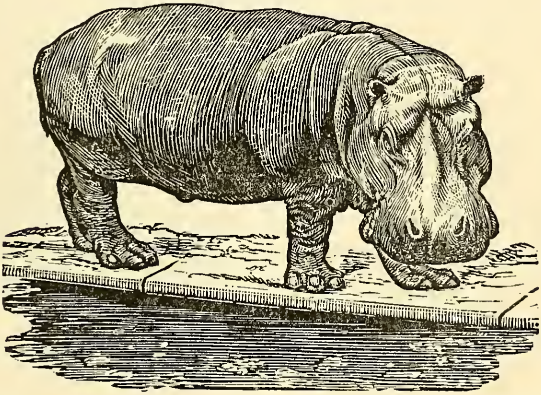
BY GRACEFULNESS IS MEANT THE QUALITY OR FACULTY RESULTING IN EASE AND ELEGANCE OF MOTION AND AGREEABLENESS OF MANNERS. THE GRACEFUL MOVEMENT IS PERFORMED IN LONG CURVES AND THE GRACEFUL MANNER IS SEEN IN THE SWEEPING CURVE OF THE GESTURE AND BOW.

The apparent structural form which accompanies graceful movements and manners is the slim and pliable structure that bends with apparent ease.



Gracefulness Large—A Swan.

The harmonious combination of several of the elements entering into the construction of the animal frame, has the direct result of producing an ease of motion, and an absence of constraint in the Muscular action, which comes under the comprehensive term of Gracefulness. More than the proportionate quantity of bone, results in awkwardness and ungainliness; while a preponderance of the nervous form runs to the opposite extreme, and gives rise to angularity of motion, fidgetiness, and feverish and ungraceful haste in action, and so on with disproportion in every other form, which in all cases is fatal to that nameless beauty of comportment and behaviour which we call grace. The conditions necessary for the production of a high degree of grace, are, a fair share of Muscular force with an equal endowment of the Abdominal powers, while the other three salient forms must be balanced, the one with the other, with the utmost nicety, without any of them possessing more than half the degree of development which has been allotted to the Muscular and Abdominal powers. Harmony of structure gives well-balanced and harmonious curves of



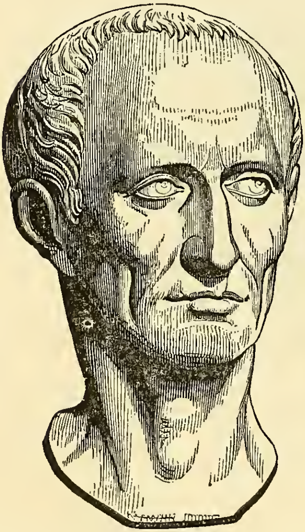
Gracefulness Small—A male Hippopotamus, taken from life, in the Zoological Gardens in London.

motion displayed in every movement of limb and muscle, and this motion is the foundation of all Gracefulness.

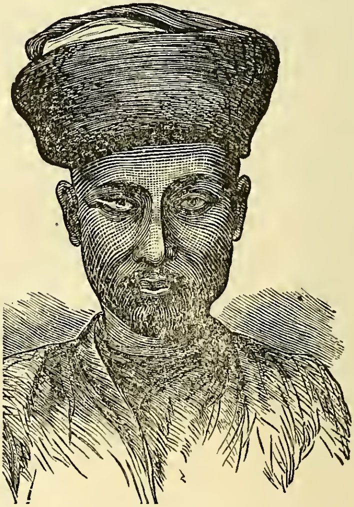
PROSPERATIVENESS.—PROSPEROUSNESS.

THE POWER OF ATTAINING THE DESIRED OBJECT.

The curved line running round the corners of the mouth, while those corners are depressed or indented, is nature's stamp or trademark on the visage of a person who has succeeded, or can do so in some department of life.



Prosperativeness Large—Julius Cæsar, the Dictator, who, as a Commander, was eminently successful.



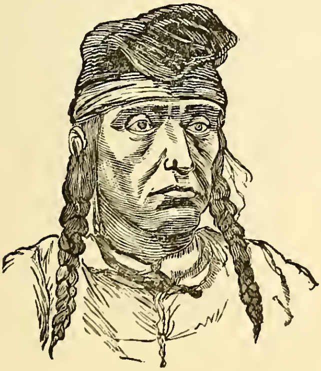
Prosperativeness Small—A Kyast Banian man, of Surat, in India.

To insure ultimate prosperity, there must not be any very weak or vulnerable points in the make-up of the body, as such ill-armed points would certainly nullify and prevent the success of any efforts; and expose the entire fortress to betrayal and destruction. For the possession of the requisite general strength, a fair development is necessary of thorax, abdomen, muscles, bones, and brain, and when this proviso is granted, the signs above given will be apparent.

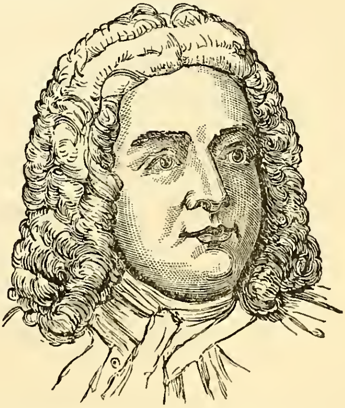
PHYSIOHARMONITIVENESS.—PHYSICAL HARMONY.

THE POWER WHICH APPRECIATES THAT PHYSICAL CONDITION IN WHICH ALL PARTS OF THE BODY ARE ROUNDED AND IN PERFECT ACCORDANCE.

When one part of the body is equal, in due proportion, to every other part in strength, and no feature seems to dominate the others in size, and all are rounded, the individual who is so happily framed, so essentially harmonious throughout, should feel grateful, and endeavour to assist others to like harmony in their natures.

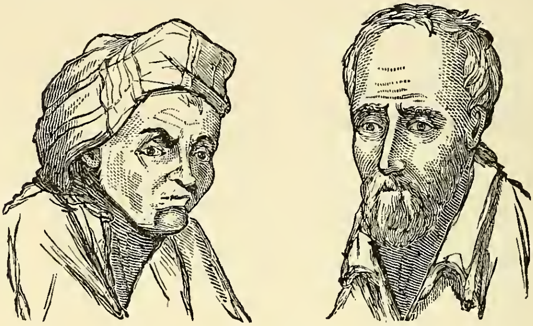


Physioharmonitiveness Small—Cut Nose, an Indian, who, in the massacre of 1862, in Minnesota, murdered 18 women and children and 5 men.



Physioharmonitiveness Large — G. F. Handel, a talented musician, whose life was occupied in promoting harmony.

By this felicitous condition of body is implied the rounding off and dovetailing of all the different faculties, so as to form a mass whose principal distinguishing feature is that of oneness, or the presence of a harmonious combination of material, and the absence of all ingredients not having a tendency to act in accord with the others. The harmony of music is the result of compatibility and fitness existing between the different tones, and combining their various powers of strength and richness, so as to produce an aggregate of delicious harmony; and the parallel between the two is much closer and more exact than one would at a first glance be inclined to suspect. The above signs will receive their full signification when taken in connection with these remarks.

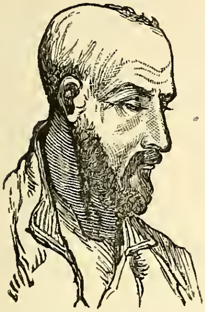


Physioharmonitiveness Large—Sarah and John Rovin, aged respectively 164 and 172 years of age.

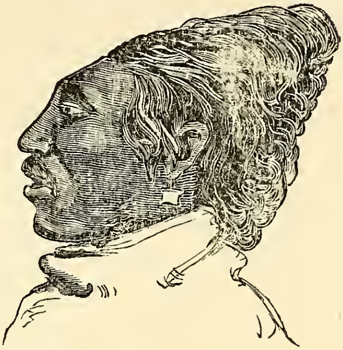
PROPORTIONATIVENESS.—PROPORTION.

RECOGNITION OF THE TRUE RELATION OF PARTS TO EACH OTHER.

The physiognomical manifestations of Proportionativeness are a due symmetrical proportion of one feature to *another joined in a body, whose parts and features are in harmonious accord, producing beauty of form.*

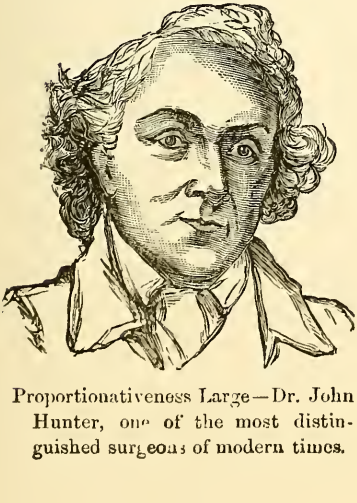


Proportionativeness Large — Petrarch Zortan, 185 years of age.

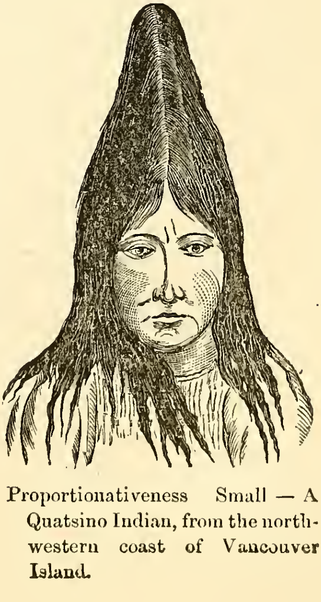


Proportionativeness Small — A Flat-Head Indian, of the south-east coast of Vancouver Island, British Columbia.

This word is sufficiently explicit and comprehensive to indicate the quality, or combination of qualities, of which



Proportionativeness Large—Dr. John Hunter, one of the most distinguished surgeons of modern times.



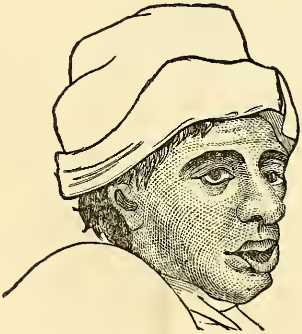
Proportionativeness Small — A Quatsino Indian, from the north-western coast of Vancouver Island.

it is the appellative. For the production of a high degree of Proportionativeness there must reign throughout a relative fitness of parts—one part having exactly that degree of strength, and no more, which puts it on an equal footing with the strength and powers of the other parts. Where these conditions are not maintained, the faculty cannot exist, except perhaps in a half-strangled form, which is not entitled to be classed under the name, Proportionativeness.

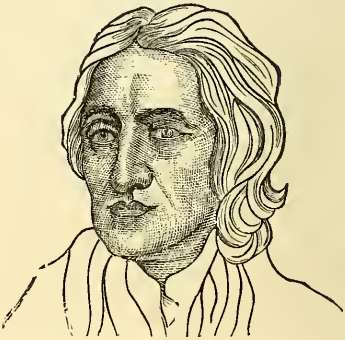
DEDUCTIVENESS,—REASON.

THE LOGICAL FACULTY OF DEDUCING CONCLUSIONS FROM PREMISES.

In the human Physiognomy, the deductive faculty discovers itself to the observer by a well-defined and prominent nose and broad face. No person has been ever known as an original and correct reasoner who had a low flat nose like that of the Chinamen.



Deductiveness Small—Foolish Sam.

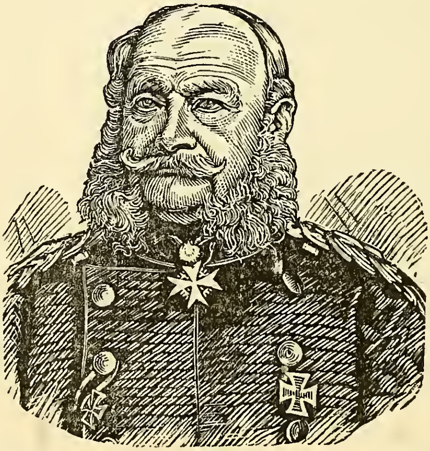


Deductiveness Large—John Locke.

This faculty more than any other appertaining to humanity, demands a rigidly even and harmonious distribution of the different elements in the conformation of the structure, attended by no ordinary degree of strength of development in each. To be able to deduce inferences from premises with accuracy and correctness requires abilities of no ordinary character, and the deducer must be thoroughly well balanced and strengthened in his structure throughout, to produce the soundness of judgment which is required to carry on mental analysis. Strength is the main element here, and this strength is evidenced by the presence of the broad high face which attends the broad, high, and harmonious form generally. Again, well maintained equilibrium in the constituents of the human frame or organization is the invariable concomitant of a robust and overflowing condition of health, and this latter element is one which is almost indispensable to protracted processes of deduction. These are the principles underlying this faculty, and the signs given above must be apparent on the form, to the exact extent of the development of the faculty in the structure, as *vultus est index animi.*

VARIOUS RACES OF MEN.

MEN have changed so much, and embodied so many varieties of features, that it would be impossible to represent any one individual that should fairly or approximately give an idea of the whole human family. We will give, however, a representative man of the nation, tribe, and family, to shew that it would be neither truthful nor just to give one man as the true type of a race. The Europeans, who are considered by many writers to be a branch of the



King William of Prussia, a specimen of European.

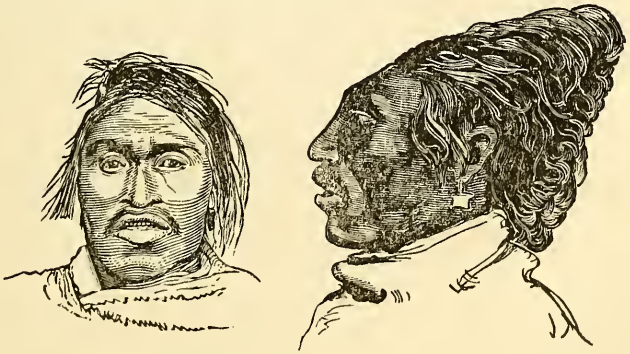
Caucasian race, and who are supposed to have come from the mountains of Central Asia, may be divided thus:—

English,		Celtic and Saxon.
Scotch,		Highland or Celtic and Teutonic.
Russians,	or	Sclaves.
Germans,	or	Teutonic.
Hollanders,	or	Dutch.
French,	or	Celts.
Irish,	or	,,
Welsh,	or	,,
Danes,	or	Scandinavians.
Spaniards,	or	Iberian and Celts.

Now, let us take those brothers, so-called, and see how varied are the types of men, and how impossible it would be, if we so desired, to represent all of those nationalities by one man. Of late, much discussion has arisen among Anthropologists as to whether mankind should be classified in one, or many races, hence there are two schools, Monogenists and Polygenists.

The following illustrations. from the so-called Indian tribes, will fully satisfy any observing person that a single copper-coloured face but ill represents the many varieties to be found in America at the present time, saying nothing about those which are entirely extinct

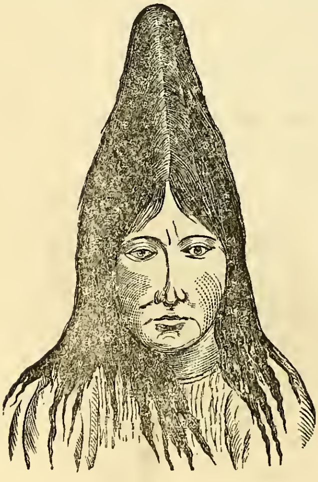
American or Indian race represented by a Digger. (See cut of a Digger Indian on page 251.)



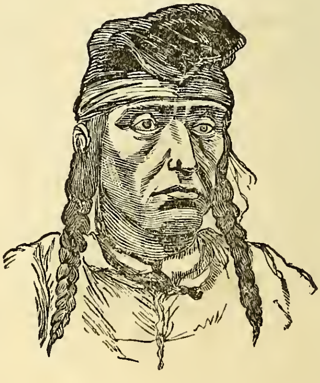
A Flat Head Indian—a front and side view.

Among the Snakes, we have seen some who resemble the Oneidas, others look like Pottawottomies, while others bore a favourable comparison with the Omahas, and yet many individuals of this tribe were surprisingly unlike any other.

Catlin, in his celebrated work on the Indian races, presents many drawings from life of the varieties, in form, shape, and feature, of the red men of the American continent. Some are tall, well-formed, graceful as Apollo, and beautiful in feature; others are short, squat, crooked-limbed, and entirely destitute of beauty or grace. Some have been described as generous, noble-hearted, and truthful; while others were crafty, cruel, and revengeful. This tribe delighted in manly sports, were abstemious, mirthful, and enjoyed purity of domestic life; while that was morose, gluttonous, gloomy, and sensual. Then how futile to attempt the representation of a race by an individual—nations cannot be pictured by isolated characters.

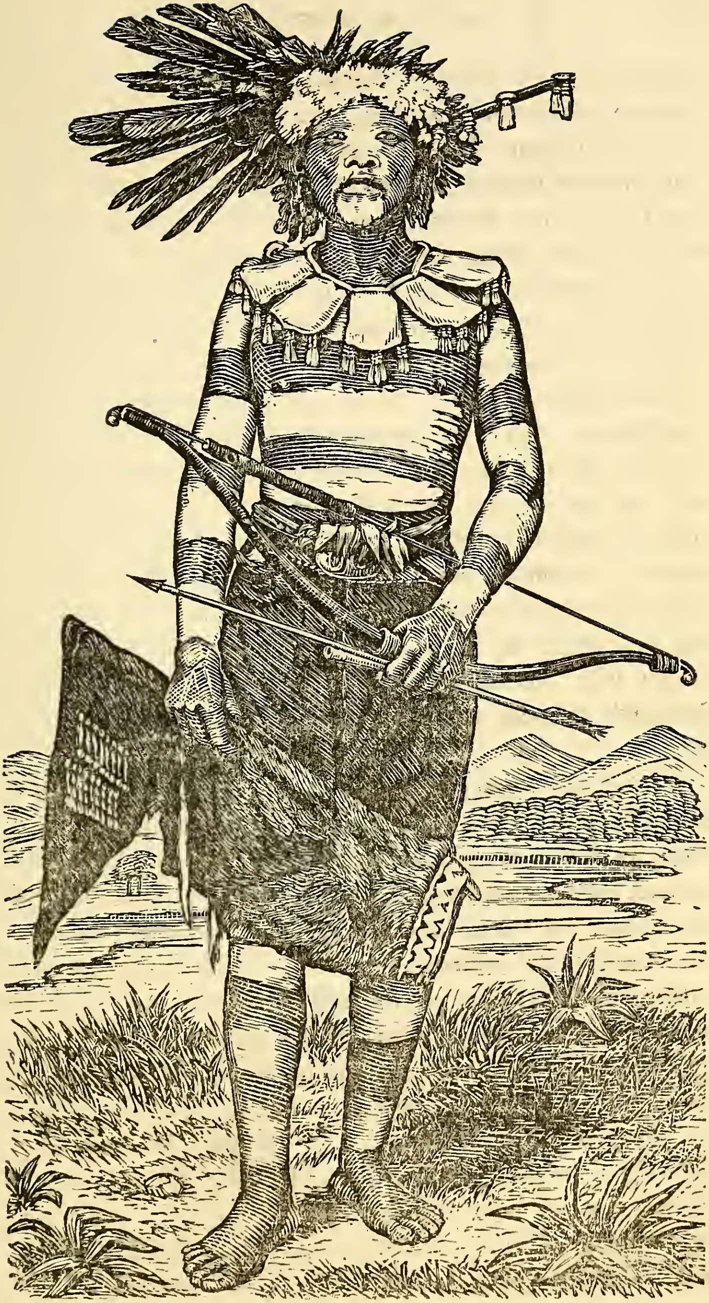


A Quatsino, of the north-western coast of Vancouver Island.



Cut Nose, a murderous Indian, of Minnesota.

The French and Scotch, said to have sprung from the



A Digger Indian, of California. Eating worms, grasshoppers, and acorns is a luxury often indulged in by the Diggers.

same branch, are entirely dissimilar. The Englishman or Russian would never be suspected of being an Irishman, abroad or at home. The flat-bottomed, broad, short Dutchman, who has been first flattened by the dead level of his country, and then has impressed his squat ideas in similar shape on his heavy-sterned sailing vessels, his dumpy copper tea-kettles, and even on his short-legged sheep and cattle, will never be confounded with the tall, haughty Spaniard, or supposed to be descended from some old Burgundian baron, who once held sway over his present inheritance. Yet these anomalies among Europeans are classified in a lump as one race by many authors. But why call all nations which may happen to be white one race? As we find quite as much variation among different nations as between so-called different races, why not call every nationality a distinct race? This same law of reasoning will apply to all races, nations, tribes, or families of people who inhabit the earth. In our humble opinion, thousands of races and tribes have peopled the earth which are now entirely extinct.

In glancing over history, in various languages, we are forced to believe that the earlier races were far larger than those we find now upon the earth. They were undoubtedly coarser, stronger, and larger men, physically, than men are at present, but not so highly organized mentally. Cultivation and climatic influences, as well as those resulting from incestuous marriages, have sadly injured the physical stature and powers of man; while sensational excitants and education have enlarged the brain, and given intellectual force and knowing power, which are the great levers of progress and civilization. These last remarks are intended to apply only to the white races, as their history is the one we have studied the most fully. Among all white races men are growing smaller and weaker bodily, and becoming more active and useful mentally. The following account of giants is evidence from other authors that in past ages men were much larger than those of the present day.

"In an excavation, made by William Thompson and Robert Smith, half a mile north of West Hickory, they exhumed an enormous helmet of iron which was corroded with rust. Further digging brought to light a sword which measured nine feet in length, and after some little time they discovered the bones of two very large feet. Following up the lead, in a few hours time they unearthed a well-preserved skeleton of an enormous giant, belonging to a species of the human family which probably inhabited this part of the world at the time of which the Bible speaks, when it says, 'and there were giants in those days.' The helmet is said to be of the shape of those found among the ruins of Nineveh. The bones are remarkably white, the teeth are all in their places, and all of them are double, and of extraordinary size. These relics have been taken to Tionesta, where they are visited by large numbers of persons daily. The giant must have stood eighteen feet in his stockings." *

In one of his recent lectures, Professor Silliman, the younger, alluded to the discovery of an enormous lizard of eighty feet. From this the Professor inferred, as no living specimen of such magnitude has been found, that the species which it represents has become degenerated. The verity of his position he endeavoured to enforce by allusion to the well-known existence of giants in olden times. The following is the list upon which this singular hypothesis is based:—

The giant exhibited at Rouen in 1630, the Professor says, measured nearly eighteen feet. Gorapius saw a girl that was ten feet high. The giant Galabra, brought from Arabia to Rome under Claudius Cæsar, was 10 feet high.

---

* From the *Oil City Times, Pennsylvania, December* 31, 1869.

The giant Ferregus, slain by Orlando, nephew of Charlemagne, was twenty-eight feet high. In 1814, near St. Germain, was found the tomb of Isorant, who was not less than thirty feet high. In 1850, near Rouen, was found a skeleton whose skull held a bushel of corn, and who was nineteen feet high. The giant Bacart was twenty-two feet high; his thigh bones were found in 1704 near the river Moderi. Fannum, who lived in the time of Eugene II., measured eleven and a-half feet. The chevalier Scrog, in his voyage to the Peak of Teneriffe, found in one of the caverns of that mountain the head of the Gunich, who had sixty teeth, and was not less than fifteen feet high. In 1623, near the castle in Dauphine, a tomb was found which was thirty feet long, sixteen feet wide, and eight feet high, on which was cut on gray stones these words:—"Keutolochus Rex." The skeleton was found entire: twenty-five and a fourth feet long, ten feet across the shoulders, and five feet from the breast-bone to the back. Near Palermo, in Sicily, in 1316, was found the skeleton of a giant thirty feet high, and in 1559, another forty-four feet high. Near Mazarino, in Sicily, in 1815, was found the skeleton of a giant thirty feet high. The head was the size of a hogshead, and each of his teeth weighed five ounces.

The numerous allusions which are found in classical authors, to the fact of human beings of gigantic size having ruled and fought for empire in the ages past, are also some proof that the present race has degenerated in size. It seems to be the natural tendency of all animal life to become smaller, or else its place is filled by creations of less bulky proportions possessing more intelligence and usefulness. The places of the mighty saurian, among reptiles, and the mammoth mastodon, among animals, have long since been supplanted by the crocodile and lizard, the horse, dog, ox, and sheep, each of which is more useful, as well as more intelligent, than those mighty creatures whose past history is written and revealed to us in that unerring book of nature—the solid rocks.

As nature gave an immense number of species of animals, so she produced an untold variety of races of mankind. Some writers on Ethnology divide humanity into five distinct races, namely, the Caucasian, Mongolian, Malay, Negro, and Indian, but a multitude of authorities disagree on this point. Virey acknowledged but two races. Jacquenot and Cuvier divided them into three. Kant gave his opinion in favour of four. Blumenbach divided them into five—the common theory. Buffon deemed them to be six. Hunter and Pritchard gave seven. Agassiz thinks there are eight. Pickering, eleven. St. Vincent enlarged to fifteen. Desmoulins said there must be sixteen races. The celebrated Morton, twenty-two. Crawford's observation found sixty varieties, and Burke noted sixty-three. Very much may be written on this subject of races, and in a subsequent work we propose to give our views at length on this interesting department of natural science. The origin of the various races is a most interesting and puzzling theme.

Many a beautiful, yet fabulous, temple of theory has been set up by philosophers of the past and present regarding the origin of man, and yet when the winds of investigation blow upon them, they vanish like the dew of the early morning before the summer's sun.

We have numerous evidences in history, as well as the testimony of bone and rock, that the men of previous ages were much larger than at present, so that, taking these facts to reason from, we can come to no other conclusion than that man is physically degenerating and retrograding.

The early history of Great Britain gives full assurance of the low mentality and barbarism which existed in that country in ages past. Yet the strength of those rude warriors was amazing. There are spears and shields in the Tower of London which an ordinary man of the present day could not handle. The suits of mailed armour are enormous in weight; and the sword of Richard I. (Cœur de Lion), which that monarch wore in battle, is enough for any common soldier to carry, without using it for warlike purposes. Compare this with the condition in stature, intelligence, and cultivation of the people in England to-day. They are shorter, lighter, and weaker, physically, but far more active mentally; and ten thousand times more work is accomplished by the machinery contrived by English minds than was ever done by the strong muscles of their forefathers.

Our opinion, founded on these observations, is that originally man was a little lower, mentally, than the lowest type of the wild Australian savage or New Zealander, and the first specimen of the *genus homo* was rather uncouth and clumsy, but strong enough to care for and defend himself against the wild animals by which he was surrounded. We know positively that man has grown very much in brain-power, but how low he was in intellect at the time, or soon after his creation, remains an open question. Yet we are firmly convinced that he was always a man of some kind.

What are the operating causes which go to reduce the physical size and strength of mankind? We answer, that nothing wields a more powerful influence over animal life than climate, and its effect can be more readily discerned than all other inclining forces. In the northern hemisphere of America, we find that of late the seasons are growing colder, the earth is becoming drier; while in England it is the reverse, and this change affects animal and vegetable life as well as man. The same specimens of trees grow much larger in tropical and temperate regions, than in the frigid. The pines, which grow upwards of a hundred feet high in North Carolina, are small enough in Spitzbergen to be enclosed in a letter, without doubling the postage. The oak, in the Arctic regions, rarely reaches twenty feet, while in Alabama and Mississippi it is five times as tall. Heat expands all substances in nature, and cold contracts, water when converted into ice being the only exception. The Laplanders and Esquimaux, inhabiting a cold region in the north, are about four and a-half feet high, while similarly half savage tribes, living in the warmer latitudes of Africa and Asia, are as tall as the best specimens of Europeans. This change in climate is probably owing to the Earth changing its poles, and tends constantly to contract the bodies of men in America, and expand those of England, and to dry up the lands of America, while England continues moist; and this cycle changes alternately in heat and cold in each country every few years.

Some attribute the lack of rain to the clearing of our American forest lands, while, in fact, it is owing to the increasing coldness, which is antagonistic to moisture. We often hear the well-grounded assertion, that it is too cold to rain. Those lands in Southern Illinois, denominated swampy, and for that reason given by the United States to that State thirty years since, are now all tillable. The bed of the Mississippi is rapidly filling up, and very much less water is discharged through this mighty river than even twenty years ago. Actual surveys of Niagara Falls evince the fact that less water, by several inches in depth, runs over the Falls to-day than did thirty-five years ago, or when Father Louis Hennepin, during the latter part of the seventeenth century, made the first survey of that sublime cataract. The oceans are receding from the land, and do not wash so high upon their shores as they did two hundred years ago. Herodotus, the great Greek historian, who wrote over four hundred years before the birth of Christ, tells us, that when Menes, the first sovereign who exercised dominion over the whole land of Egypt, ruled, his territories were not very extensive, for all Lower Egypt was a morass. In California are found the fossil vertebra of whales, high up in the gravelly bank, which is not now reached by the salt waves of the Pacific. It is true that volcanic power could have lifted this bank, or sunk the bed of the ocean, causing an apparent lessening of the waters; but our opinion, formed from this and other facts, leads us to believe there is less water on the earth's surface than there was twenty, fifty, or one hundred years since.

The water is gradually being taken up in the process of building the vegetable world, and thus converted into solid substances. Hydrogen, the basis of vegetable life, is one of the constituents forming water, by a union with oxygen, and these two elements largely abound in vegetable and mineral substances. Great changes are taking place on the surface of our globe through the agency of electricity and chemical action, and all these changes tend to lessen the general bulk of the atmosphere and the oceans, by converting them into solids. Thus, things which are seen are constantly coming from those things which are unseen.

Electricity appears to have been a primal agency in moulding the visible universe into its present rounded form. The lightning currents passing through the coil of an electro-magnet, obtains increased power and intensity by taking the round or spiral direction, and if a sufficiently strong current can be produced, solid masses of iron may be supported within the centre of the electric force, apparently isolated from all surrounding bodies.

The telescope has revealed the fact that many of the distant groups of nebulæ partake of the same circular or spiral form; and whether we watch a tiny mote floating in the sunbeam, or a mighty star sailing through immensity, the same law of circles seems to prevail and govern both. To Electricity, then, we attribute the cause, in the Creator's hands, of all the forms of matter which surround us, and to its continued action may we assign the changes which are at present occurring on the surface of the earth.

During the revolutionary war in America, we are told the average weight of officers in the army was 200 pounds; and during the late civil war, the average amounted to but 149 pounds. This is a decrease of 51 pounds in about eighty years, and if reliable, is certainly a striking proof of the gradual decline in physical strength of the people of the American continent.

The average height of the corn stalks in Illinois is decreasing, while the size of the ears of corn diminishes in a similar ratio. The grasses are likewise much less in height than formerly. All this is owing to a lessened mean temperature of the atmosphere, and a consequent lack of humidity, which is the right hand support of all vegetation. How do we discover that North America is becoming colder? There are many evidences, a few of which we will offer:—At that geological period, known as the Carboniferous era, when the vegetable matter which forms our vast beds of coal was growing and being deposited in successive layers, there were ferns and other specimens of Cryptogamous plants growing in the north temperate zone more than 120 feet in height: now, the largest ferns in the same region are but samples of vegetation. The coal-forming era required much greater heat for the maintenance and rapid growth of those rank pulpy mosses which have no existence at the present time. The atmosphere held a larger amount of carbonic acid gas, and was therefore more dense, supplying the necessary food to those swift-developing vegetable forms. The rapid decay of the falling vegetation would cause partial combustion, which in itself evolved a great amount of heat. The fossil remains of animals are found in the rocks of temperate regions, which now only inhabit the warm regions near the equator. The habits of those creatures were fitted for, and their food could alone be obtained in very warm climates, yet their remains are found imbedded in the ice, far to the north, in the region of perpetual snow. It is evident, when they were alive, this cold climate was then much warmer.

Again, the strong assertions of old men, who are now living, that the seasons are far colder of late years than when they were young, is another substantiation of this fact. The cause of our Indian summer may be partially explained by the combustion of the dropping leaves in the fall. This combustion warms the atmosphere. As the forests are removed, the amount of falling foliage is lessened, consequently our Indian summers are gradually vanishing or less apparent. The cause being removed, the effect disappears. The application of those facts to the causes which have operated, and are still operating, in producing varieties of race among men are very clear. Given, a change of climate, food, and surroundings, and man changes. The Duke of Sutherland imported some very fine specimens of pure merino sheep into Scotland some years since. When those animals reached their new home, their wool was long and silky. They were carefully kept separate from Scottish sheep, and watched and fed by attentive shepherds, yet in three generations their wool was as short and curly as that of any Highlander's flock in the country.

Another instance. Some fine thorough-bred hogs were shipped to the Cape of Good Hope for the purpose of replacing the long-nosed, slender-bodied chasers, common to that part of Africa. Notwithstanding all the care taken to preserve the purity of the breed, a very short time was sufficient to change all their characteristics, and their descendants were more like kangaroos than decent hogs. Climate had done its work. So with man, the varieties or races vary as he moves east or west, north or south. If the temperature of the earth's surface changes, he must conform to the change, and obey nature's mandates. The laws of nature are immutable, but their operations are constantly producing variations in the form and character of every living creature within her boundaries.

COLOURS OF RACES AND WHAT THEY INDICATE.

In looking back over the records of history left by ancient races in their traditions, monuments, and language, we see indications of varying colour in tribes and races of men.

Some of the ancient marbles, recording the triumphs of the old Assyrian kings, portray light and dark races chained as prisoners of war to their cars of triumph.

The Gothic tribes, from which sprung many of the present European nations, were a fair-skinned, light-haired, and blue-eyed race; large of limb and tall of stature.

The Celtic race are said to have been short, small, and swarthy in complexion. These facts are enough to prove that a variation in colour, &c., existed many thousands of years ago; the Assyrian marbles being estimated to be 5,000 years old.

The entire period of human history contributes to prove that the light-haired, blue-eyed races are capable of the highest degree of civilization, and this race is produced and flourishes only in the temperate zones. There was a period when blue-eyed persons were rarely seen, and to-day, seven-eighths of the world's inhabitants have dark eyes. Varying circumstances, and the intermarriage of different races in temperate climates, will in time change the colour of any race and produce blue eyes.

By transporting the African to the temperate regions of the United States or England, great changes may occur, but 1,000 years would not be capable of making him into an Anglo-Saxon or Celt, Greek or Roman.

Classical authors have described some of the barbarous Germanic races as having been *xanthous*, and others as *melanic* in complexion.

Tacitus, for example, thus describes the Germans as fierce, with blue eyes and red hair, having large and powerful bodies. "*Habitus quoque corporum, quanquam, in tanto hominum, numero idem omnibus truces et cerulei oculi, rutilæ comæ magna, corpora, et cerulei, oculi impetum valida.*"

Horace makes mention of the fact that there were many blue-eyed youths in Germany—"*Nec fera cærulea domuit Germanica pube.*"

Ausonius and Lucan each called the Germans yellow-haired and blue-eyed.

The ancient Danes are spoken of as light of hair and eyes.

Diodorus, Silius, Livy, and Strabo, each mentions that some of the Celts and Gauls had red, yellow, and golden hair, or *flavus* and *retilus*. Yet it is generally acknowledged that the Celtic race were swarthy and dark-haired, with very few exceptions.

With the above historical proofs, we will proceed to offer a scientific basis for this variation in colour, &c. The law of progress develops itself only amongst the variegated races, as those having different colour of hair, eyes, and complexion. This law of variation has its origin in the Caucasian race, and the fact of variety in one race proves it can be brought to a great degree of perfection.

It is a curious fact, that all the animals domesticated with us, which are of any benefit to mankind, had their origin in the mountains of the Caucasus, and the same law of variety in colour, which proves man capable of a high order of civilization, also finds its counterpart among animals. Wherever we discover colour unchangeable in animals, from parent to offspring, there we have inability for domestication, or uselessness.

The black bear, the zebra, the tiger, are all animals untamable, resisting all efforts of man to subdue them, and their colours are as fixed as their natures; they never change in stripe or spot, more or less.

On the contrary, the domestic animals are constantly varying in colour, and their progress in usefulness and gentleness of character is steadily advancing.

The dark races, where the universality of colour prevails, are as perfect as they will ever be while remaining on the plane where the Creator has placed them.

Take the Indian as an example,—he is perfect in the place in which we find him, and every thing he has about him is just as perfect, as it has more than one entire office to perform. Examine, if you please, the Indian's frail canoe. All the science of naval architecture cannot contrive a more perfect thing. It is constructed of the lightest possible material, carries the heaviest burthen, draws the lightest draft, and is propelled by less power than any other proportionate vessel. He paddles it up the smallest streams; he comes to falls; takes it out and carries it round, and sets it afloat once more upon the stream, and it goes wherever his will or discretion may chance optate.

The cool shadows of the night gather in the valleys, and he draws his canoe on shore, turns it over, and a protecting roof is afforded.

His modes of warfare are adapted by nature to his wants He cuts his bow from the first tree, while another furnishes the arrow; the sinews of the deer supply the string, and, thus equipped and armed, he is ready for war or the chase. It is well known that the bow and arrow, in the hands of an Indian hunter, is not inferior, as a means of securing the buffalo or bear, to any instrument used by civilized people.

The Indian, with his well-trained mature muscle, will draw a bow which a white man cannot bend, and will drive an arrow like lightning through the tough hide of a buffalo as large as an ox. Yet this same powerful and dark-skinned race cannot withstand the influences of civilization, and ultimately fades away before them like dew before the morning sun.

It is only a few years since the North American Indians inhabited that continent from ocean to ocean. But the effect of civilization, in the short space of two centuries, has driven them to the base of the Rocky Mountains, and into the deserts of Mexico, from the Atlantic and Pacific coasts.

The commercial enterprises of the fair-skinned races have well-nigh obliterated those once powerful tribes.

This Indian transmits the same colour of hair, skin, and eyes, to succeeding generations without a single variation, and he cannot be domesticated; while the Caucasian has no assurance that his children will bear the same complexion, shade of hair, or colour of eyes as himself or wife. In his family, both parents may be blue-eyed, and half the children may have eyes that are black or gray, yet the whole family are capable of the highest mental, moral, and social culture.

Reasoning from analogy, the whiter anything is, the more pure and perfect it is likely to be of that species.

The Guinea negro being the darkest of all races, is the most impure and imperfect; but the negroes in America are far removed from the Guinea type; while, in contrast with these, the white races move in the highest plane of social life, and are foremost in the march of civilization.

Look at this from another point of view. Take the various kinds of wood, and we shall find the white the most perfect.

The oak, which has proudly braved the storms; of this, the black is the poorest, then the red is a little better, the yellow still superior to the former two, but the white oak is the most perfect of its species.

Then, again, suppose you wish to select a stone; there is the dark blue slate, or a better one, the gray granite, or still better, the white marble; but the most perfect and durable is the diamond, which is the whitest and most valuable, being pure crystallized carbon, standing at the head of the mineral kingdom.

Thus, reasoning from all nature, darkness and barbarism are synonymous terms. How much purer is silver than copper or iron; and platinum, which is white as silver, is the purest of the gross metals.

Sugar, when not refined, is dark brown, yet afterwards becomes white.

Coal oil, as it comes from the well, is black, but after being distilled becomes red, then yellow, and finally, with thorough purification by refining, it assumes the transparency of water, and is colourless.

Many other illustrations of the theory may be found in God's great laboratory—nature. Take a sheet of common white paper, how much more pure it is than when it was rags. Chloride of lime, pure water, and the mechanical ingenuity of the manufacturer, unite to make it white and pure.

Let us once more turn to the animal kingdom. We shall find the offspring of all birds or animals are untamable which shew no variation in colour of hair or feathers. Instances have been known where the bear, fox, leopard, or tiger have been supposed to be tamed or domesticated, having been taken when young; but, as their nature matured, they have seized a child, and tearing the helpless creature in pieces, have then returned to their savage companions in the forest. Those animals never vary in colour from their parents.

The wild goose and turkey, after months of domestic life, betake themselves to äerial flights at the first opportunity, preferring a free wild life to a domestic one.

The horse, dog, sheep, pig, and cattle, are ever varying in colour from the original stock. The black sheep in a family is sometimes found in the human one, as well as in the woolly flock.

All the fruits and vegetables which flourish well in a state of culture, are those which vary in the seedling, as the potatoe, turnip, apple, pear, peach, plum, cherry, &c., &c. These all had their origin where the white race flourished.

We must conclude, therefore, that colour is the banner under which nationalities and types are to be classified, as far as regards their susceptibility of improvement.

The following comparison from nature will shew how she colours her different departments. All things correspond; nothing is out of proportion or disarranged.

In spring everything is green, the skies green or blue to correspond.

In summer there is some haze, and the sun in rising and setting gives off a golden expression, so the fields reflect a yellow light.

The autumn presents a more mellow appearance; the air is balmy, the fruits give forth their odours, the smoke and haze of fall takes off the sharpness of the keen sunlight, and softens the purple and brown tints upon the hill sides into glorious landscapes of richest hues.

Then comes cold, cheerless, and cloudy winter, with his snowy mantle enveloping all nature in white folds. The chill winds drive back life's scarlet flow, until the cheeks of human kind vie with the colourless surroundings.

There are hares (*Lepus timidus*) in Central New

York that are white in winter and gray in summer, and weasels, or more correctly stoats (*Mammalia carnivora*), which exchange their summer gray for winter white.

These facts only prove that nature keeps in harmony with herself in all her different departments.

Nature being our sole true teacher, we should take lessons from her in choosing the colours of our garments for different seasons. Each period should have its dress to correspond, and humanity should display as much sense of appropriateness in apparel, as other portions of animal life.

In winter, in snowy regions, we should wear white; or, if heavy clouds shade and darken the land, we should wear black.

In spring, something green would harmonize with nature, and in summer, lighter colours, such as blue and buff would accord well.

When the fall comes, browning the foliage and vegetation, the lesson taught is, to wear brown or gray, and such flowers as are of a dark colour.

In spring, the flowers worn should be bright, like the blossoms of earth. As each season has its garb to be in harmony with it, so we should adapt our colours to its prevailing tints, that we may appear to belong to that world of which we are all a part.

The colours of races would be adjusted in accordance with the same natural law. Cold white countries would have animals of the same complexion, and people who would correspond with their surroundings.

But, we suppose that the different periods of the world have produced varying colours of races; for the Indians, whether found in warm or cold climates, are dark and coppery. The deductions to be made are these:—The carboniferous era produced dark animals, dark people, and dark earth formations, and as the earth grew colder, the people became lighter who had their origin at a later period, and thus was the earth peopled.

We find everything corresponds with this deduction. The oldest inhabitants should be the most degraded, and the latest production the most enlightened; and such is the fact. The dark races are fading away. We believe the dark races inhabited the whole world at one time; then came the lighter or coppery race, who peopled the earth and flourished for a time. Then, at a later period, the white races made their appearance, and with them came great advances in progress, which surpassed all former growth,—each class of the white race being superior to that preceding it.

We think this will be found to be the true solution of the problem,—the cause of the production of lighter races in succession being, because nature, with her unerring laws, demands a correspondence in colour, as well as in all other characteristics. The white races are advancing, and indeed all races move from the coarser to the finer texture, from the physical to the spiritual.

The Indian is a superior being to the Negro, and the white man is superior to them both. Thus we find that in the creation, as we rise in intellect, the animal tribes and man are possessed of more complicated organs of thought, and, as a result, of more intelligence.

THE GENERATIVE CAPACITY.

"Be fruitful, and multiply, and replenish the earth."—Gen. ix. 1.

Nature has placed in all vegetable and animal life a principle of reproduction, of which the cardinal characteristic is, that like produces like. The theory of spontaneous generation denies this characteristic, by asserting that, under favourable conditions, inert matter can give rise to what is so essentially different from itself, as vitalized or moving matter. The *à priori* argument is, however, so strong against the possibility of that which is dead originating that which is living, that I consider it much more reasonable to suppose that, under those circumstances which are falsely conceived to favour spontaneous generation, veritable *living* germs are developed into a size and activity which, for the first time, bring them within the range of human cognition. This theory of spontaneous generation has actually been carried to the extreme hypothesis, that the earth, of her own inherent energy, produced the first human beings,—in other words, the proposition has been broached, that matter could give rise to mind. Even the Greek mythologists, in their fanciful account of the origin of man, escaped this materialistic tendency, for while, according to the fable, Prometheus succeeded in fashioning clay into the human form, he was yet obliged to obtain from heaven the divine fire—the ethereal flame—by which alone he could inspire his creatures with life and thought.

But although the thing produced always bears a clearly marked resemblance to the producing agent, it cannot be an exact copy of the parent stock, unless it is generated under exactly the same circumstances. Those variations of type which are the result of the varieties of circumstance, have been referred by Mr. Darwin to what he calls Natural Selection, and still more lately described by Mr. Spencer as the Survival of the Fittest. The causes of variation in the structure and functions of the successive generations of a species are, in some instances, clearly discernible; but in the vast majority of cases they elude discovery. It sometimes happens that the variations of structure fail to keep pace with the changes in circumstance. For example, a recent English writer has pointed out a number of organs in the human system, such as the spleen and the pineal gland, which at one time doubtless served some purpose in the animal economy, but having now survived their usefulness, continue to exist only as the mysterious representatives of past conditions of human life.

The generative propensity is the subtle source of a powerful attraction to the opposite sex; but those who are deficient in this regard have at least this compensation, that they find it comparatively easy to preserve the modest reserve of their manners and the virtue of their character. This appears, when we consider that a great capacity for generation induces a strong inclination to sexual connection, for it is a law of nature, that those who are liberally endowed with any capacity are always prompted to its liberal using. Those animals with large mouths are naturally large feeders, while those which possess dilated nostrils are gifted with a keen scent, and a strong disposition to use it. If a man is largely endowed with the numerical faculty, he will so delight in its use that he will almost involuntarily count the telegraph poles on his way, or the planks in the bridge which he crosses. The generative capacity is no exception to this rule; hence it always stimulates desire, and renders self-restraint difficult.

Human beings differ greatly in their productive capacity; some persons being blessed with very large families, while others appear incapable of generation. The desire of offspring—the wish to stamp one's nature, as well as to transmit one's name and fortune—is one of the most natural, general, and useful of human passions. The Jews, in common with most ancient nations, considered a large family a great social distinction; and the Romans rewarded the parents of many children with civic honours. But in these days of luxury and selfishness, children are too often considered a nuisance, whose birth is to be prevented, if possible, and whose rearing is to be transferred to ignorant and irresponsible servants.

Girls are usually trained to believe that animal passion is, among women at least, a sign of coarseness, whereas, in either sex, it is the invariable accompaniment of a perfect physical organization. Generation transmits the essence of life, and the generative impulse shews, therefore, an abundance of the life force. Washington and Jackson were childless, but the life-element of these great men was employed in loftier and more useful exercises than the mere multiplication of the species. The inferiority of the children of great men has been often and justly remarked, yet the rule is not without exceptions, as we see in the case of the Adams family in America, and in the Pitts and Foxes of England. In the latter country, the sons of Mrs. Trollope, Disraeli, and Bulwer, and the daughters of Thackeray have all achieved literary distinction; and in France, the sons of Paul de Kock, Alexander Dumas, George Sand, and Victor Hugo have been equally celebrated.

The importance of generation in the economy of nature is plainly manifested by the assiduous care with which it is guarded. In the vegetable kingdom, the seeds are wrapped until fully ripe, and often long after ripening, in a protecting envelope. They are, moreover, placed in that part of the flower or fruit where they are least likely to be broken or prematurely dispersed, as in the apple, peach, &c. In like manner, in all animal life, including the human species, the organs of generation are so located as to be most effectually protected from external injury. Here, as everywhere, we have occasion to trace the wisdom and goodness of the Creator, and to acknowledge, in silent adoration, the perfection of His orderings.

> "Even if I would, I could not;
> Even if I could, I would not
> Turn the course of Time's great river,
> In its grand majestic flow;
> Grapple with those mighty causes,
> Whose results I may not know.
> All life's sorrows end in blessings,
> As the future yet shall show."

We find by observation, that the most prolific animals are of a round form. The turtle, which lays from sixty to one hundred eggs per season, is nearly as round as a ball, and the domestic hen is of a similar figure. Those human beings who are remarkable for their generative capacity have this same round build. They are also distinguished by the prominence and width of the face in the region of the eyes. The desire of coition, which is an attempt at production, is the invariable result of all ardent love for the opposite sex. Hence the eyes, which are one of the signs of love, are placed in juxtaposition with the sign of the generative propensity; for whenever nature assigns a similar function to any two parts of the body, she always places them in close local connection. The face of the rabbit which bears more young at a single birth than most animals, is widest at the eyes, from which point it rapidly narrows above and below. Hogs are rather wide and full at the eyes; and they bear several at a birth, and sometimes bring forth two, and even three litters in a year.

The multiparous animals, such as the cat (*Felis domestica*), and the rabbit (*Lepus cuniculus*), all measure wide across the head at the eyes. Those which are biparous are narrower in this region, while the uniparous species are the narrowest of all. The cow, which usually brings forth but one calf at a birth, and never produces but once in a year, is as large or larger at her horns than across her eyes. Among human beings, hollow temples and sunken eyes are the invariable signs of unfruitfulness. Jackson's face is remarkable for its narrowness in the region of the eyes.

I append a brief and incomplete list of those animals which may be considered peculiarly typical of the uniparous, biparous, and multiparous zoological groups:—

UNIPAROUS ANIMALS.

African Elephant,	*Loxodonta Africana.*
Indian Elephant,	*Elephas Indicus.*
Indian Rhinoceros,	*Rhinoceros unicornis.*
Rhinaster, or Borele,	*Rhinoceros bicornis.*
Keitloa,	*Rhinoceros Keitloa.*
Kobaoba,	*Rhinoceros Oswellii.*
White Rhinoceros,	*Rhinoceros Simus.*
Hippopotamus, or Zeekoe,	*Hippopotamus amphibius.*
Tapir,	*Tapirus terrestris.*
Kuda—Ayer or Malayan Tapir,	*Tapirus Malayonus.*
Zebra,	*Asinus Zebra.*
Quagga,	*Asinus Quagga.*
Dziggetai or Koulan,	*Asinus Onager.*
Ass,	*Asinus vulgaris*
Buffalo,	*Bubalus buffelus.*
Cape Buffalo,	*Bubalus Caffer.*
Banteng, or Javan Ox,	*Bibos Banteng.*
Bison,	*Bison Americanus.*
Aurochs,	*Bison Bonassus.*
Camel,	*Camelus Arabicus.*
Bactrian Camel,	*Camelus Bactrianus.*

Alpaca Llama,	*Llama Pacos.*
Ox,	*Domestic.*
Zebu,	*Bos Indicus.*
Horse,	*Wild and domestic.*
Roebuck,	*Capreolus Caproea.*
Reindeer,	*Tarandus Rangifer.*
Stag or Red Deer,	*Cervus Elaphus.*
Fallow Deer,	*Dama Vulgaris.*
Sheep,	*Oris Aries.*
Goat,	*Hircus Aegagrus.*
Giraffe,	*Giraffe Camelopardalis.*
Eland,	*Orcas Canna.*
Ibex,	*Capra Ibex.*
Koodoo,	*Strepsiceros Kudu.*
Hartbeest,	*Alcephalus Caama.*
Brindled Gnoo,	*Connochetes Gorgon.*
Rock Kangaroo,	*Petrogale pencillata.*
Woolly Kangaroo,	*Macropus Laniger.*

BIPAROUS ANIMALS.

Brown Bear,	*Ursus Arctos.*
Syrian Bear,	*Ursus Isabellinus.*
American Black Bear,	*Ursus Americanus.*
Grizzly Bear,	*Ursus Horribilis.*
Seal,	*Phoca Vitulina.*

MULTIPAROUS ANIMALS.

Lion,	*Leo Barbarus.*
Tiger,	*Tigris Regalis.*
Newfoundland Dog,	*Canis familiaris.*

There are over forty varieties of dogs all belonging to this Class.

Wolf,	*Canis Lupus.*
Hog,	*Sus scrofa.*
American Fox,	*Vulpes fulvus.*
Opossum,	*Didelphys Virginiana.*
Hedgehog,	*Erinaceus Europoeus.*
Racoon,	*Procyon lotor.*
Rabbit,	*Lepus cuniculus.*
Hare,	*Lepus timidus.*
Pole Cat,	*Putorius foetidus.*
Skunk,	*Mephitis varians.*
Cat,	*Felis domestica.*
Marmot,	*Arctomys Marmotta.*
Mink,	*Vison Lutreola.*
Musk Rat, or Ondatra,	*Fiber Zibethicus.*
Squirrel,	*S. Vulgaris, and S. Carolinensis.*
Rat,	*Mus decumanus.*
Mouse,	*Mus musculus.*

THE REARING OF YOUTH.

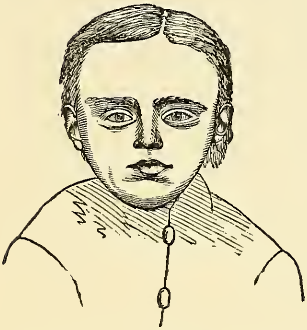
An acquaintance with Physiognomy enables us to surround the young with such attractive influences, in the shape of education, that their future paths of life lead onward to virtue, wealth, and honour. "Train up a child in the way he should go," while it is a profound axiom in morals, has also an obverse side; for the child is frequently trained in the way he should *not* go—so that in age a departure from the wrong becomes as impossible as from the right.

We can never over-estimate the importance of right training in childhood.

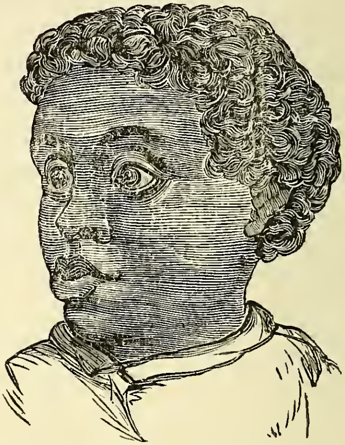
The highest aim of the best civilization is to produce good and useful men and women; and as goodness and usefulness are increased or diminished by health or disease, it follows that the preliminary to all true moral growth is a body physically sound. As the end of life is to be good and true, the beginning of life must be a preparation for it. "Take no heed what ye shall eat or drink, or wherewithal ye shall be clothed!" may have been an excellent motto for the early teachers of Christianity in a world then, as now, devoted to shows and shams, but it is not applicable to the rearing of children. Indeed, the first question to be asked should be, "How shall we clothe the new born infant?" Thousands of helpless little creatures are annually slaughtered through ignorance of parents on this all-important subject. We frequently find newly born children with their tiny arms and chests exposed to the cold air, or covered with a flimsy piece of cotton, as an apology for protection to the delicate and sensitive network of blood-vessels just commencing to carry their minute streams of heat and life from the heart to other parts of the body. Instead of thin cotton, they should have soft wool or canton flannel on the legs, arms, and chest, and should always be thoroughly covered, as warmth is of equal importance with food in this early stage of life. Some parents, with the best motives, wash very young children in cold water at least once a day, while they would shiver at the thought of being forced themselves to the same ablutions. Infants require warmth under all circumstances, for at least some months after birth; and the mournful wailing too frequently heard from their throats, which should early learn to sing, is caused by chilliness, inducing indigestion and difficulty in breathing. As cold is unfavourable to the circulation of the blood, so absence of growth follows in its train. The puny arms of children are so many mute appeals against this pernicious custom of covering them with thin clothing. When the body is comfortable, the nervous action is harmonious, and instead of irritation and crying, the child manifests pleasure by infantile smiles and peaceful sleep. Wool and silk are better non-conductors of heat than cotton, and for this reason more suitable for children's clothing; in fact, a proper amount of clothing in a variable climate is a great preserver of health for persons of all ages. We have no right to introduce children into the world without making proper provision for their food, clothing, and education; and the time may come when society will pass a law for the protection of children in these respects. Statistics prove the unfortunate fact that the poorest districts in large centres of population shew the largest number of children; but the same tables also shew that some prolific families have a much greater number of deaths, clearly proving that the ignorance and other ills incident to poverty are disastrous to the lives of the young. Next in importance to clothing comes the question of food. Nature has wisely provided against mistakes and ignorance in this matter, by causing the mother to become the source of the child's nourishment. Too frequently, however, through previous unfortunate training, or ill health, the mother is unable to supply proper food to her child. When this source fails, the next best resource is milk direct from the breast of another woman, who is in good health, and of an amiable disposition. The moment we step outside natural conditions, responsibilities begin to increase; thus, the selection of a good nurse is of the highest importance. The blood of a virago imparts ire to her milk and acrimony to her suckling. The milk of sin cannot nourish righteousness. A child put out to nurse with a woman of ugly disposition became wholly unmanagable at four years of age, and was sent to a house of correction at the age of five, while the remaining children (three in number), who were nursed by their own mother, possessed mild and amiable tempers. No other cause could be assigned for the difference between this child and the others, but that of the vicious food which it drew from its improper nurse. Next to human milk, that of the cow comes first in order, and if the animal be not sprightly and good tempered, her milk is not fit for the child's food. After a certain period of growth, the teeth begin to make their appearance, which is an indication that other descriptions of food are then required. What shall it be? If we enter any of the tens of thousands of country dwellings scattered over the west, in nearly all of them may be found young children; and if we chance to sit down at meal time with the family, we shall observe the baby of one year old seated in its high chair at the table, where smoked bacon, rank coffee, sour bread and vegetables cooked in fat, are the sole dishes for use, unless a tough-crusted, dried apple-pie happens to be added by way of extras, and yet not one of those articles named is fit for that child's stomach, and, we might almost add, fit for those of mature years. But so it is, day after day, and year after year, if its constitution can bear it, such food is forced into the stomach; and the result is, a young heir of immortal strength and beauty, a little lower than the angels, becomes transformed into a being of coarse features, still coarser passions, and the world sits down to count her loss. Those articles of food which retain the vital principle, such as wheat, corn, and vegetables, are the best suited to build up a healthy organism. We think what we eat. The tiger and lion, which destroy and ravenously eat their red-blooded feast, respond to its nature in cruelty and savageness, while the domestic cattle, like the sheep and cow, shew the results of a diet of grain and grass in lives peaceful and contented. Wheat contains especially the two ingredients necessary to build up bone and muscle in the human frame. Meat is like chaff, or the fibrous straw, not the soul or essence that lives. "The life of the flesh is in the blood" so say the Scriptures. When the blood is drawn out in slaughtering the animal, the meat that is left contains only a small amount of nutriment, and it takes large quantities to be sufficient to nourish the human system. The wisdom of using Graham or unbolted flour for bread consists in the fact that the outside of the grain holds the lime or calcareous matter, while the interior furnishes the starchy substance; those two build up the muscles and bones, and are found in wheat in better proportion than in any other cereal. To make the genuine Graham bread from this flour, follow the directions given below. Take of unbolted flour sufficient to make the desired quantity, and mix with cold water to the consistence of pancake batter, add a little salt. Then have a griddle with sufficient scallops to hold ten or twelve, or more of the size of a biscuit each; grease the griddle that the biscuit may not stick. Heat the oven and griddle as hot as possible below red heat, then ladle the batter into the griddle, place it quickly into the oven, and when well baked, it can conscientiously be placed upon the table as the most healthy, nourishing, and the sweetest of all kinds of bread; having never been soured to raise, yet it is very light. Large loaves may be made of Graham flour, with hop yeast, as white bread is made, by adding a tea-cup of molasses to a good-sized batch of dough. Careful housekeepers will remember the secret of success lies in following closely the directions given. Ripe fruit, as an article of daily food, is one of the best that can be given to children; its effect is to keep the liver in an active healthy condition, by which means digestion is thorough and perfect. Pork should never be placed on the table before the young, as it tends to feed their animal nature too much, rendering the blood sluggish, and destroying that delicacy of taste which is the especial privilege of youth. Tea, like pepper, spices, and vinegar, is wholly unfit for children, creating in them an appetite for stimulus, and this grows with more mature years, demanding more and more excitants, until the desire has become so strong that the answer is only found in rum, brandy, and whisky. By this means parents throw around their boys the influence of the grog-shop and gambling house, and the mother wakes up too late to find her son surely on the road to ruin. His downfall was commenced in his father's house by setting daily an intemperate table. Place before your children plain diet, throw out of the door or window your spices, pepper, and teapot, and then your child may grow up a temperate and honourable man. Tea contains Theine, which is a poison, and coffee, caffeine, also a poison; both of these are extracted or drawn out in the process of making tea and coffee, and ignorant people drink it, believing it does them good. The effect of coffee is also to thicken the blood, inducing torpidity of the liver; consequently we invariably find that regular coffee drinkers are liable to "bilious attacks," frequently resulting in bilious fever, ending in death. Inactivity of the liver induces fever ague, dumb ague, jaundice, and its effect on the brain is to produce mental obtuseness or stupidity. Tea, by stimulating the nervous system, often produces mental imbecility and nervous derangement of a serious character.

After food and clothing, the next important step with regard to the young is education. The effect of proper mental training is so great, not only upon the physiognomy of the growing child, but on the future conduct of manhood, that too great stress cannot be laid upon its vast importance. The world is to be regenerated alone by the advances and improvements made in the education of the rising generation. Every day a certain number of worn-out bodies die, while an equal number of young men step into their places. If they are wiser and better than those whose positions they fill, the world is just so much the better, and *vice versa*. An extended summary of the method and results of education will therefore be tolerated by every thoughtful reader. The capacity for civilization, or educational influences upon a race will vary with the time their ancestors have been subject to them. Those who have been in the path of progress only a few years, are not susceptible of more than small attainments. This principle is demonstrated in the schools of the south in the American States to-day, in the islands of the Pacific, and indeed among all uncivilized tribes, where missionaries have been. This theory may appear novel to the general reader, but not to those who have, through years of unremitted observation, paid attention to the subject.

When I gave my first course of lectures in Boston, this white boy was brought to me for an examination, and in no instance have I seen a better example of a high sensational nature, intensity of organization, and a true type of "Young America." Such children need rural life, plain food, and complete abstrusion from books and school. This negro boy, with his feeble intellect, which meagreness he inherited from his forefathers, who cultivated only their animal passions and motary powers, can accomplish very little; while the white boy's ancestors were among the best educated families in the world, and he inherited a large brain and intense sensations from those who had used and enlarged their powers of sensation before him. He is cognoscitive, and known to be capable of much mental labour. The negro boy, after many years' schooling, can hardly write his own name, or solve the plainest problem in arithmetic. The white boy is an adept in memorizing and retention.



White Boy. Orison J. Stone, of Boston, who learned his letters at three years of age, and could repeat a large book from memory when three years and six months old.



Negro Boy.

The first lessons, and the most important ones in the education of the child, must come from the mother; there are no others so valuable and lasting as her influence, and that of home. Fanny Fern once said,—"A mother's time can in no way be better expended than in talking to her boy." I deem this the greatest truth ever told by any person in modern times. Those early impressions stamp the coming man or woman for intellectual eminence and honourable fame, or for disgrace and infamy. Short moral lessons, which any good mother can give, are the moulds into which the rectitude of her child is run. How vividly come back in late years the impressions made upon the mind while in childhood we lingered around the loved mother's footsteps—

"I love to wander back at times,
Through memory's faded halls
And gaze upon the cherish'd scenes
That hang upon its walls.

"Friends, playmates—those of days gone by—
Come thronging into view;
The good, the loved, the beautiful—
Fair forms that round me grew.

"Upon the hill the schoolhouse stands
Embowered 'neath the trees,
Where, every morn the bell's sweet tones
Ring out upon the breeze.

"Beyond, the peaceful crystal stream
Flows languidly away,
While on its banks a happy group
Of merry children play.

"Thus, scenes, bright scenes to memory dear,
Come crowding o'er each other;
But the dearest one of all to me
Is the fond face of my mother."

As those impressions are ever fresh, how wonderful is their value to us. Hence the transcendent importance, that the mother's teachings should be faithful and true to her highest convictions of right and duty. The delicate impressible mind of the child can go no further back than those first of home persuasion and discipline.

OBEDIENCE SHOULD BE THE FIRST GREAT DUTY TAUGHT TO A CHILD, because, when old enough to do wrong, it is sufficiently old to correct. Were all children taught to obey and respect their parents, much sorrow would be saved to age and silvery locks. How true are the words of that "sweet singer of Israel," who said, "The fear of the Lord is the beginning of wisdom." Observe, not the middle or end, but the *beginning*, thus obedience is the first prime lesson inculcated.

LOVE FOLLOWS OBEDIENCE, and here again we may be permitted to quote that old book where it says, "Perfect love casteth out fear," and when love is established between parent and child, obedience grows therefrom, and the future steps forward become surer and easier. Love is the centre around which revolves the whole affectional nature of man. It is the lever which moves the social circle, and it becomes the mother's duty to lead aright and preserve in purity the affections of herself.

"Keep thou love's purity,
To God leave the rest,
Know then in surety,
Thy care will be blest."

The love of a tranquil home enters into a child's soul like sunshine into the rosebud, slowly but surely expanding it into beauty and loveliness. The cultivation of the affections and the development of the bodily senses begin together. The first effort of the intellect is that of individualization, and next, is to associate in the mind the names of objects with the sight of them.

AN EARLY HABIT OF CLOSE OBSERVATION IS OF VERY GREAT VALUE, and the method of object teaching is the most effectual plan, because the eye and the ear correct and criticise each other's impressions, leading to an accurate appreciation of the various objects with which the child comes in contact. As the mind becomes more capable of judgment we may commence to teach principles, but it is necessary to explain the reasons clearly and definitely, or the child will begin to resign itself to authority, and time in this way is worse than wasted or thrown away. The memory may be improved by increasing credulity, without adding an iota to the stock of real knowledge, and this prepares the mind for any kind of slavery which knaves or superstitious people may choose to impose upon them. If we assist the young to attend to the result of every action, to adjust their little deviations while giving free exercise to their observation and reason, they will gain facts, and educe principles, which no later influences could controvert. Those evidences of truth would be food for reflection which temptation would fail to remove. By such a system of training, the young mind would ultimate in the forming of a person who would fulfil the high destiny for which he was created, making himself and others around him happy. There are plenty of schools in our country to give the proper training to youth in mental studies, but none to teach him how to conduct himself after he leaves that school. This is the real and important work of home, but unfortunately it is left very frequently to circumstances good or bad around in the community where his lot is cast.

POLITENESS IS ONE OF THE FINE ARTS OF LIFE, and an element by which success and honour are obtained. It should be an object with all parents to teach their children true politeness. This lies not in a bow or simple "Thank you," but in a feeling of unselfish desire to make others happy. The Golden Rule which Thales, the Greek Philosopher, Confucius, the Chinese Lawgiver, and still later, Jesus, the Galilean, taught, of "And as ye would that men should do to you, do ye also to them likewise," the foundation of all true politeness, and when put in practice will lead us on the road of philanthropic good manners to all mankind. Children should be taught to give a pleasant bow and smile to those they meet, and especially to acquaintances. How winning is a smile, how little it costs, and yet how readily and largely it sells. One simple heartfelt smile, with courteous manners, may make your fortune. Those whose politeness has its basis in selfishness, will appear polite only when it appears to their interest to be so, but when that is not at stake, their manners are boorish and repulsive.

GENTLENESS IS A VIRTUE TOO RARELY FOUND IN YOUNG BOYS; their boisterous sports may conduce to make them wild, but it is a sure sign of a superior mind to see a youth of twelve or fourteen give evidence of the influence of a kind and tender mother. There can be no possible objection to a boy being playful, but roughness of manners is twin to ugliness of person, and either are great defects in the young, but readily subdued by good sense and kind wishes for others.

PATIENCE IS A RARE VIRTUE, so rare, that patient men are like showers upon the desert, rarely seen, but always gladly received. A patient boy is a "*rara avis.*" If any of my young readers will consider a moment that the letters that go to make us those words were each set up separately, and that many men worked days and even years in contriving and perfecting those wonderful steam printing presses, which readily throw off 20,000 newspaper impressions every hour, they will comprehend something that can be accomplished by patience and perseverence. The constant action of the rain and frost crumbles away the mighty mountain, so will your patient efforts in time remove mountains of difficulty from the journey of life.

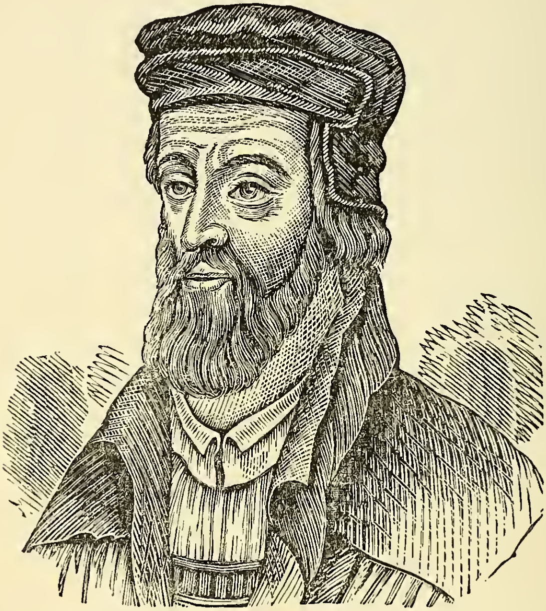
Cultivate patience, then, to promote your own happiness as well as that of others. When we give way to flights of bad temper, it becomes at last our master, and we are held in ignoble slavery. Every time we lose self-control the harmony of our lives departs, happiness flies away, and the pleasant face of the world, reflecting our own image, wears a frown, which is destructive of peace and contentment.

COMMINGLING OF THE SEXES.—The advantages of an education where boys and girls occupy the same room, and where the lessons are pursued together, are very great. Socially, intellectually, and morally, those children are better than if educated separately. Do we not see how polite and careful, as well as gallant the boy of sixteen becomes when in the presence of his young lady friends. When a troop of boys go nutting in the woods, how rough and savage they often are; but how subdued in demeanour, how gentlemanly they become when their female companions appear. This purifying influence of the sexes upon each other, it is impossible to over-estimate. It restrains solitary vice, cultivates self-respect, induces a generous rivalry in noble paths, and builds up true men and women calculated to benefit themselves and those around them. Like the sun in spring-time, it produces a rapid growth of the moral nature.

ALL CHILDREN SHOULD HAVE AN AIM IN LIFE, and an honourable means of support. Franklin said,—"He who has a trade has an estate." Every young person, male or female, should learn a trade, or have some specific occupation. You may be the son or daughter of a rich man to-day, but to-morrow you may be homeless and dependent upon your own exertions. The fluctuating and evanescent condition of wealth is such, that its permanence cannot be relied on except in very few cases. There are thousands of families in this country, now poor and needy, who once possessed wealth sufficient to gratify every whim and caprice. In the midst of their prosperity the storm or fire came and swept off all, leaving them to the cold uncertain charity of the busy world. When the reverse, or poverty comes, the first question that arises, is, "What shall I do for a living?" You ask your feet, and they say, I do not know." You question your hands, and the answer is, "I have never learned to do anything." The head is then interrogated, and a mournful voice responds, "I was brought up to be supported, and consequently know nothing of getting a living." There is but one man who can befriend you under such circumstances, and that is the sexton. To avoid such a miserable fate, let every one fit himself for a vocation in life. Read for the sake of learning something. Study with an aim to be self-reliant and self-sustaining. If you cannot be a lawyer, be a carpenter, a shoemaker, or a blacksmith; the latter will likely bring you independence, and preserve personal honesty. If you are adapted to a farmer's occupation, do not try to practice medicine. Many men run their heads against the gospel desk, who would have been of more benefit to the world had they learned to pound the anvil instead of the pulpit. Others try to plead law, who are better adapted to mining in quartz rock than in Blackstone; and numbers of merchants are more qualified by mechanical gifts to make cloth than to sell it. Every individual should be examined by a practical and competent reader of human character, in order to learn to what calling, trade, or profession he is most naturally fitted. The motto placed over the grotto of the celebrated Oracle of Delphos, was, "Man, know thyself." Its importance to-day is as great as it was three thousand years ago. To acquire that knowledge is worth more than any other, as it is the key-note to all true growth. By learning something of our original constitution, our excellencies and defects, our capacity of reasoning and persuading, and by studying the methods of self-government, we may in the end unite our own good with that of others, and thus benefit the world in the right way.

PERSEVERE IN ONE THING. — There are many young persons who, after choosing aright their trade, relinquish it because they meet some unpleasant things connected with their labours, vainly hoping to find some occupation where all is easy and all delightful; such will learn they can never rise to excellence or become prominent in the world. The pre-eminent great men of all ages are those who have toiled, hour after hour, day by day for successive years, with unswerving perseverance. Murillo, the great Spanish painter, spent three weeks in painting the handle of a broom. George L. Brown, artist, served an apprenticeship of twenty years in Rome. Bierstadt was similarly industrious. Michael Angelo, the great Italian painter, sculptor, and architect, gave twelve years to the study of anatomy; and when he was seventy, he said he had much yet to learn.

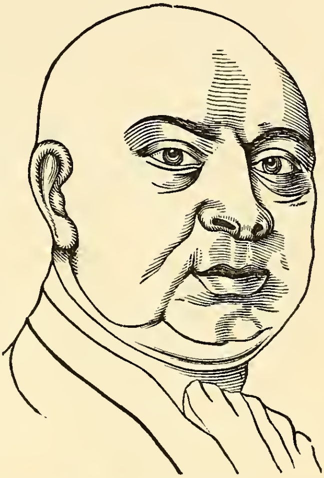
In every trade and avocation in life, there are unpleasant duties to be performed, and obstacles to be overcome in all callings. The successful ones "take off their coats and roll up their sleeves," conquer their prejudices against labour, and manfully, as our forefathers did, strive to bring back the soil to productiveness and fertility. Whether you are in the shop, the factory, or the forum, let your motto be *perseverance* and *industry*, for these alone can conquer the world. In summing up the foregoing remarks, we may say that the character of clothing affects the features. Climate makes smooth, or shrivels and dries the skin. Varieties of food feed various features; for instance, pork nourishes the sides of the lower part of the face; beef puffs out the cheeks and rounds the nose; vegetables feed the eyes and their surroundings, while the grain cereals nourish the forehead and brain. The effects of education are, to give sparkle to the eyes and definiteness to the nose; to light up the whole countenance, and chase away its gross character; it lines out the forehead, eyelids, and lips, sweeps off the cobwebs of passion, and introduces symmetry and harmony. Note well the difference between these two physiognomies; the one a man of intelligence and education—the other without the chastening influence of culture.



Educational Type. John Wyckliffe, "the Morning Star of the Reformation."

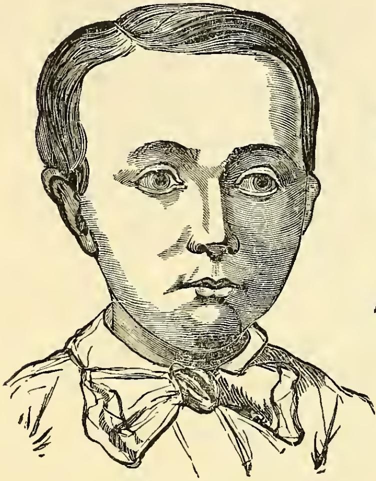
The lessons of obedience learned in childhood have their due weight in marking character on the countenance, or "Phiz." Let us pen picture two boys. The one has practiced obedience to his parents, and is respected and loved by all who know him. The other, through neglect or natural ugliness, is the most wilful, disobedient little rascal one can imagine. When told to go to school, he went in the opposite direction, either fishing, loafing, or doing mischief; would steal, and lie, with no apparent remorse of conscience. For examples of a representative boy of each of the above characters see the Cuts on page 292.

Love, whose influence has been chanted and sung by poets of all ages, has the power to change a demon into a saint, and its effect upon the physiognomy is to make it bloom like spring flowers; to refine the skin, to fill out the chin, and to give warmth and joy to the whole expression.

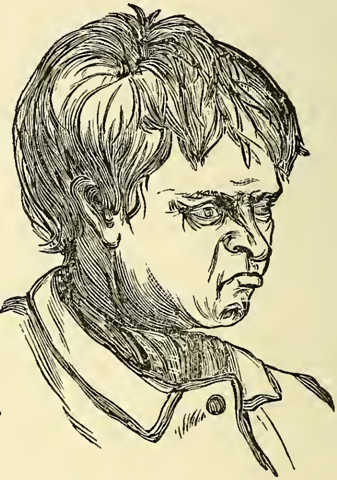


Ignorance. John Broughton, a bloodthirsty pugilist.

Politeness and good manners ever win their way in this world of appearances. If coming from good feeling in the mind, as all true politeness most assuredly does, then it will ennoble every feature, give tone to facial curves, and touch with sublimity each lineament. Gentleness carries an attraction which lends gracefulness to thought everywhere; it retains the balance of relative proportions in outline, and its effects rest upon the countenance like the mellow light of the setting sun. Patience is the root of all civilization. It supports the spirit of industry; chastens every virtue; and enfolds, like a mother, every child of reform. By patience man has contrived to spread the sails of commerce on every sea. It furnishes mechanical horses and carriages for the travellers of all lands; it rolls the produce of the mighty West to millions of consumers in the East; despatches messages of business or affection on the wings of the lightning; and spreads the news of Europe in a few minutes to every city and hamlet in America, while we return to them the tidings of our western hemisphere. Patience is, indeed, the helm of every enterprise. To have a simple aim in life is tantamount to the possession of a sane mind. The Bible says, "A double minded man is unstable in all his ways," and when we have two or more occupations, they so distract and divide the attention that we become vacillating and almost untrustworthy. Unwearied patience and persistence will accomplish what talent will grow faint with the consideration of; the look of a man who has perseverance will be more intense and solid than those who are wavering and unsteady. Systematic exercise has an all-powerful influence in causing the youthful countenance to tell truths of character. We often meet faces which ten years since were beautiful and full of generous aspirations, but a life of idleness for ten, or even five years, has changed the happy light of youth into the cloudy gloom of insipidity and



Love and Obedience.



Hate and Disobedience.

coarseness. Young children should early learn to do "chores," to induce habits of industry. At ten or twelve years they should have their allotted hours of labour, this will develop not only their bodies, but will also make them practical and sound in mind. About the age of puberty active labour will prove very beneficial, by leading the rapidly expanding energies of body in the road of useful occupation. In later years to be constantly employed will be a safe-guard against the vices of fashionable life. *Well directed earnest labour is the only honest path to happiness.* Whisky drinking, with its attendant vices of tobacco using, gambling, slang, and idleness, have filled our jails, insane asylums, poorhouses, and tens of thousands of suicidal graves. There is one other thing which sadly mars the life of young people in the present age. I refer to the sinful practice of self abuse. Many begin it before they become aware of its terrible injury to the body and mind, and when self-control is lost, they grow weak physically and mentally through a continuance of the habit. This vice paints its deformity on the countenance of its victims, but for the sake of their feelings we refrain from giving the signs which are indicative of this soul and body destroying evil. If any of my readers have thus fallen, let me entreat them to make an effort to release themselves from its degrading influence, and they may eventually rise once more into the sphere of a better life. Children are the flowers of virtue, scattered by the wayside of life. Alas! how many of them, like the seed of the sower, fall into poor or thorny ground, where they either perish from lack of healthy surroundings, or the thorns of vice spring up and choke them. It is a disgrace to modern civilization that more than one half of the children born, die before they are seven years old; it is a still greater disgrace to know that a healthy, well-fed, well-educated child is the exception, and that unhealthy, ill-mannered, vicious children are the rule in many communities. The students, scholars, teachers, and scientific young men are few; the drunkards, gamblers, idlers, and useless ones are many. This ought not to be so in the United States, the country that boasts of free schools, free government and free land; or in Britain, which is the centre of commerce and civilization. May we hope that what we have written will tend to develop a better and happier condition, by leading parents to consider deeply the importance of a wise and proper training for youth.

THE CONNECTION BETWEEN VARIOUS DEPARTMENTS OF THE HUMAN BODY.

To those who desire to understand human character, the connection between its various parts is of vast importance, and to master the subject, considerable research will be necessary.

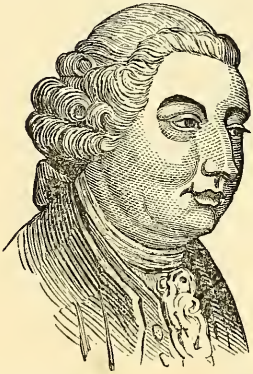
The following plan may be pursued in investigating this department of Physiognomy. Examine the lower animals in order to discover their peculiar developments. The lion has much magnanimity in his disposition, and fears no other animal; he is king of the forest and jungle. He would disdain to injure a mouse or small animal, unless in extreme hunger. Look at his face, and observe what confidence, dignity, and self-reliance he manifests, as much as to say, I would not stoop to a mean act. It is a fact that such traits of character are possessed by this particular species of animal.

Next, observe his anatomical peculiarities. We find that he possesses large lung power, and that its attendant avenues of breathing are both large and wide. The cheek bones stand out prominent, the hips are small, but the shoulders are broad, with heavy mane. Wherever we find this connection, of breadth of shoulder and breadth of cheek or malar bones, we shall discover great capacity of lung power, and the attendant character or disposition is the same in both men and animals. The lion gets in a rage in a moment, and regains his tranquillity the next; so it is with men who are of similar form.

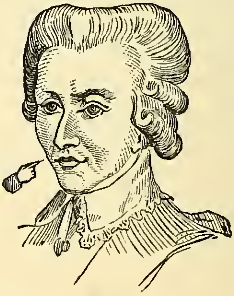
The elephant is as wide at the hips as at the shoulders, and experience has shewn that this animal never forgets or forgives an injury. He has been known to remember an insult for twenty years. His anger is less evanescent than the lion's rage.

The elephant has a large stomach, with a wide mouth, and either indicates retaliation, that is, where the mouth is wide from side to side of the face, or from one corner to the opposite extreme of the mouth. The abdominal viscera are connected with that department which supplies it with work, and the mouth is the place where food first begins the process of digestion. Large width in this region indicates strong digestive apparatus.

The hog has a large mouth. The turkey also, that is, by measure round from one corner, outside, to the other,



Excellent powers of Digestion. David Hume, who could partake of a hearty meal and apply himself to study immediately after, without the least inconvenience.

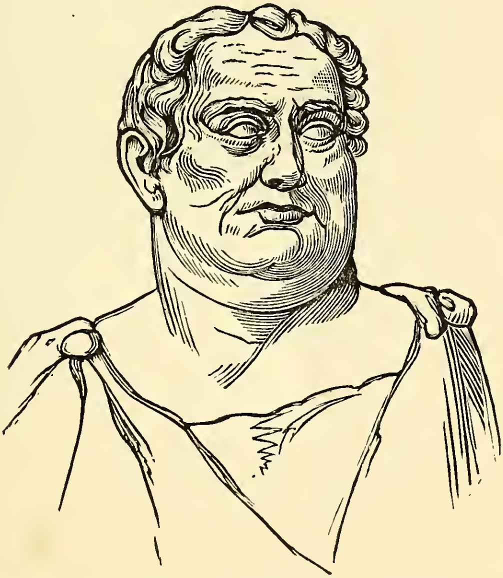


Feeble of Digestion. Gustavus III., whose happiness was poisoned by dyspepsia taking the longest circumference of its opening. The turkey and hog have remarkable digestive power.

Chickens grind up pieces of bone, lime, glass, &c., without inconvenience.

The whale is another animal of wonderful digestive power, and we shall find wherever this width and depth of mouth exists, in animals or men, that strength of digestive apparatus invariably follows.

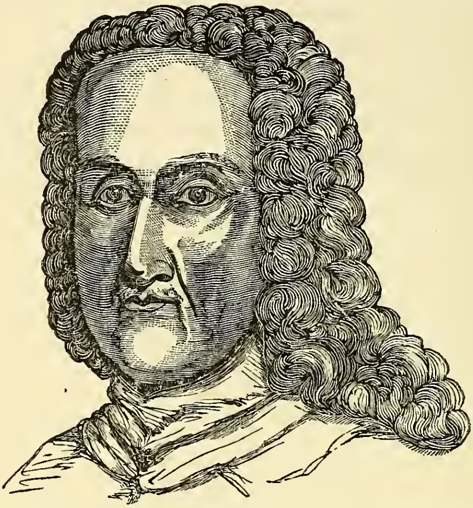
Observe a man with large mouth, full cheeks opposite the mouth, long deep heavy chin, and wide from the chin to the mouth, and we readily discover evidences of superior digestion, and a strong or good stomach.



A good Digestion. Vitellius, A sensuous gourmand Emperor of Rome.

All men who shew these peculiarities of build, possess the disposition of the animal that has the same condition of body. The low monads or polypi have each large mouths, with full surroundings to the mouth, and they possess the most powerful digestive tract of anything known. These illustrations might be extended indefinitely, but, to use a homely proverb, "Enough is as good as a feast."

A few good illustrations, well drawn, will convince the candid mind, while men, who are sceptical about everything, are so thick-headed that a tenpenny nail would find hard work to penetrate their brains with a force of fifty pounds to drive it.



A poor Digestion. Charles VI., Emperor of West Austria, who died of dyspepsia.

Wherever we see men with a hollow or narrow portion of the face on the inferior maxillary, under the third molar tooth, there is no surer indication of weakness of the kidneys. The face being wide on the jaws at the point indicated in the annexed cut, of Vitellius, manifests excellent power to throw off the urea of the system, and a narrowness in this part of the face will be found in unison with weakness in the small of the back. Hence, we reason that a connection or intimate relation exists between those two parts of the body.

There is a close connection between the eyes and the sexual organs; this is illustrated more in women than in men, and in the female, among animals, more than among the males. The reason is, they have more activity or work in that department than the male.

The eyes are watery in certain periods, as seen in the cow and mare during heat. The eyes are glassy during pregnancy, and this fact is conclusive proof that cannot, and will not, be contradicted by any careful observer.

Those animals that possess the strongest sexual instincts, like the boar, have a peculiar eye, that gives a sensual expression to the face. It is long, from side to side, and narrow from the upper to the lower part; and such eyes, whether they are found in man or animals, are evidence of a sensual character.

Eyes that are round, as in doves, evince a love of hugging, kissing, or fondling.

Horses enjoy each other's company; dogs the same, and play with each other for hours together; but hogs are gruff, they fight and grunt while doves are billing and cooing, and kittens are fondling, and playing, and licking each other, very often.

All animals with round and well-arched upper eyelids, are affectionate in their disposition, and their love is more platonic than animal. Old Erasmus had the pig-like eye, and despite all his learning, he was one of the most piggish of men.

He possessed very low and ardent love, and he loved and cherished only base passion. While another man is nearly always kissing the girls, and yet they all place implicit confidence in him; and such men are worthy of entire trust, and bear it honourably, as their natures are loving, but not brutish, or hog-like.

The love-birds of Australia have eyes as round as bullets, and those we have seen in California were always together, and appeared very fond of each other.

THOSE SOFT BROWN EYES.

"Talk not to me of the eyes of blue,
That never change with a smile or a frown:
You may call them bonny, and tender and true,
But give to me the eyes of brown.
O soft sad eyes! 'neath your melting mood
My heart-throbs thrill with a glad surprise:
I yield my power, as a woman should,
To the mystic charm of those soft brown eyes.

"I seek the gaze of the tender blue,
Till my thoughts are rife with the worlds afar;
I view, in the flash of the sparkling black,
The meteor-light of the wandering star:
But a want scarce told, and a pleasure pain
Sweeps o'er my soul like a saddened strain;
And all my hopes are lost in sighs,
As I mourn for the love of those dark brown eyes."

BLACK EYES AND BLUE.

"Black eyes most dazzle in a hall;
Blue eyes most please at even fall;
The black a conquest soonest gain;
The blue a conquest most retain.
The black bespeaks a lively heart,
Whose soft emotions soon depart;
The blue a steadier flame betray,
That burns and lives beyond a day.
The black may features best disclose;
The blue may feelings all repose.
Then let each reign without control—
The black all mind—the blue all soul."

The authors of the above lines we do not know; but the verses serve to shew that they consider the eyes love's medium. O. W. Holmes says—

"The bright black eye, the melting blue,
I cannot choose between the two;
But that is dearest all the while,
That wears for me the sweetest smile."

And Charles F. Hoffman—

"Yet with that eye could flash resentment's rays,
Or proudly scornful check the boldest gaze,
Chill burning passion, with a calm disdain,
And with one glance rekindle it again."

Or Byron—

> "Soft eyes looked love to eyes that spoke again."

> "Give me the eyes of black or blue,
> Ever round, loving, faithful and true;
> Heaven's round orbs, love vigils keep,
> Half-open optics reveal the brute asleep."

All eyes possess love, but in a different manner; one has strong animal passions, that give a piggish look, while the pure filial love sparkles with all the tender emotions of a mother or wife.

Much can be said about the eye and its colour, as that has great significance; but the colour does not destroy the principle of the shape of the organ, as we shall find the same rule to hold good through all variations of colour in the eyes, as in the colour of the skin. Nations, whose colour remains unchanged, have the eyes alike in colour, and they are non-progressive.

Dark races, like the Indian and Negro, are naturally revengeful, like the elephant; and black eyes evince more or less a revengeful disposition. This law of nature carries itself through the various shades of the black races, and we shall find that they are everywhere more revengeful than the light race or races.

E PLURIBUS UNUM

THE INFLUENCE OF FOOD ON CHARACTER.

Food is that which, when taken into any living animal organism, makes blood, bone, muscle, integument, hair, brain, life, &c. On food all animals are dependent for living existence; without it there would soon be universal death. But that is not all: not only are animals dependent on food for life, but the character of that life is dependent upon the kind of food on which they feed. According to the nature of the food eaten, will be the idiosyncrasies of the eater. The turtle dove, for example, feeds on seeds, and seeds being the highest and most essential part of plant life, produce in the dove the highest type of animal life, viz., love-mating. Indeed, so prominent is this kind of life in the dove, that the expression, "gentle and loving as the dove" has become proverbial among men; although it is only here and there that you will find a man who has taken pains to find out the reason or ground of the dove's disposition and character. Only life can produce life; and as all seeds and grains contain within themselves the germs, not only of bare life, but life of the very highest kind possible to plants, that the dove, which feeds on seeds and grains, should possess correspondingly the highest kind of animal life, ought not to be considered an arbitrary arrangement, but in beautiful harmony with reason. An effect, philosophy tells us, must partake of the nature of its cause; and food being at least the occasioning cause or support of all animal life, whatever kind of life the food indicates primarily, will be imparted to, and engendered in the animal into whose organism it is taken. The hog eats animal food of all kinds, clean and unclean, snakes, offal; indeed, nothing is too filthy for its stomach, and everybody knows that it possesses only the lowest form of animal life, and has become the most gruff and unlovely of quadrupeds. The same thing is apparent also in children. The transmission of hereditary influences has much to do in the formation of character; but it is impossible for an observant mind to be insensible to the fact, that many of the characteristics of the young are traceable to diet. Body affects mind,—that cannot be denied; and in early years, when growth is rapid, and food is taken into the system and retained in large quantities, and more frequently than in after life, the truth of what we assert is most apparent. The child that sucks the milk of the mother who bore it will naturally take on that mother's moral characteristics; while the orphan, compelled to take in the milk of an animal, will reveal in its character some of those idiosyncracies peculiar to that animal. This is not a visionary statement; it is founded on fact, and can be testified to by those who have paid any attention to the subject. An illustration of what we mean was found in 1870 in the family of Captain P. M. Choutea, of Kansas City, Mo. In the captain's family there was a little girl, five years of age, who had been deprived of a mother's milk and nursed on the milk of a goat, and when she grew up and was able to run about, she gave unmistakable evidence of the truth of that law for which we contend. She had a strong and very unusual desire for climbing. She would mount rocks, fences, and go to the tops of houses, and, in fact, jump about in every respect like the animal whose milk she had sucked. Nor when in her climbing moods did she manifest any tokens of fear; and these peculiarities became apparent in her as soon as she was able to move about. Having had occasion to converse at one time with the captain on the tendencies and disposition of the girl, he very readily admitted the powerful influence of the goat's milk on her character, and told us that she was the most remarkable girl in the respect just noticed that he had ever seen. He said, moreover, that the goat became so much attached to the girl, that she never cried but it ran to her, and if windows were in the way, it would jump through them as if they formed no obstruction, and on reaching the child would bend over her, and in its own way would endeavour to induce her to draw its milk. Similar to this is an instance mentioned by Evelyn, on the authority of Scotus (See *Numismata*, p. 312), of a boy who, having been nursed on the milk of a goat, manifested, as he grew up, the leaping and climbing propensities of that animal. And the same author mentions the case of a boy who, after being fed on the milk of a sow, could never be reclaimed from running into ditches, wallowing in puddles, &c., all of which traits of character are peculiar to the unclean animal from which he had drawn his sustenance. Again we say, there is nothing arbitrary in this. You cannot bring that which is clean out of that which is unclean, nor, conversely, can you bring that which is unclean out of that which is clean. As the fountain is, so is the stream. If the one be pure, the other will be pure, except, of course, in the case of those streams which, having left the fountain, are fed by impure tributaries. The child who is nursed with the milk of a wicked, immoral mother, will at a very early age manifest immoral and wicked characteristics. No man can study character, as revealed in our large cities, in low streets and alleys, where drunkenness and debauchery prevail, without noticing this. "He is a chip of the old block,"—a saying common among us, is just an illustration of the law we are seeking to enforce, although in many cases the words are uttered heedlessly, in ignorance of those principles on which the proverb rests. If you place a kid under the nursing of a sheep, you will find that when the kid becomes a full grown goat, it will have lost much of the goat's natural propensities for climbing,—will be more gentle and quiet than other goats, and its hair will be of a finer tissue. And so, again, if a lamb be nursed by a goat, it will be found, when it becomes a matured sheep, that it will manifest less of the quiet gentleness of other sheep, and its hair will be of a more wiry nature than it would have been had it been nursed by a mother ewe. Giraldus Cambrensis speaks of a sow fed on the milk of a hound, which, when it grew to maturity, hunted deer equally well with an ordinary hound. And what is true of the lower animals is equally true of man. Like creates like. Dion tells us that, when Caligula was a babe, his nurse put blood on her breasts that he might suck it, which accounts for the bloodthirsty, inhuman nature of the man when he held the destinies of Rome in his hand. His parents, it is said, were well-disposed and loving, but that blood which he sucked in his childhood counteracted the antenatal influences, robbed him of true human feeling, and converted him into one of the greatest and most detested tyrants the world ever produced.

Hitherto we have spoken only of the influence of food on individuals; but what is true of them is true also of entire nations. Tell us on what a nation feeds, and we shall be able, in return, to point out some of the characteristics of that nation. France is weak, volatile, easily prostrated by difficulties, without moral stamina, and hard enduring strength of character. Why? Because of the food on which the nation is fed. They live chiefly on flabby substances, frogs, adulterated luxuries, &c., which produce no bodily firmness, and in consequence, they lack moral courage, and have not the confidence of sterner nations. Germany, again, lives on solid food, flesh, bread, &c., and in consequence its sons are of a nobler type, true, faithful, trustworthy, good friends, and strong enemies. But nowhere under the sun, perhaps, is the doctrine we teach so exemplified as in the island of Great Britain. In that part of the island called Scotland, we find a race of hard-headed, strong-willed, clear-minded men, who are strong of purpose, and vigorous in carrying out the same. Scotland is, comparatively speaking, a land of safety. Few of her sons commit fraud. Her thieves are generally imported commodities, and scarcely a murder that was ever committed among its heather-clad hills or hard granite streets could be traced to one of her own children. Mr. M'Call, chief of Police in Glasgow, told me that there had not been a murder committed in Glasgow in two years, which is a record that, for a city of 500,000 inhabitants, has not an equal in the world. But go south to England, and you find a different class of people. There you meet with more apparent politeness; but beneath a sleek, smooth surface, there is wanting the true back-bone of character for which Scotland has always been known. The newspapers are full of stabbing reports, murder reports, robbery reports, and scarcely a day passes in which breach of promise cases and divorce cases are not in the courts. The English, though not so low in character as the French, are more allied to them in moral strength than they are to the Scotch. They are a volatile people, speak a good deal, and are much given to bragging, but are far from being so sturdy in action as their northern neighbours. Nor are they so readily trusted among themselves. If two young men, one Scotch and the other English, equally educated and equally recommended, go to a London merchant in search of a situation, and the merchant is obliged to choose between them, he invariably chooses the Scotchman. He feels that he can trust the latter notwithstanding his blunt and apparently rude exterior, and can commit to his keeping that which he could only confide with fear to his own countryman. We do not wish to convey the idea that England is upon the whole a dishonest nation, we only wish to impress upon our readers what must be evident to all who have become acquainted with the two countries, that confidence is more readily placed in a Scotchman than in an Englishman. And again, in the higher departments of intellectual life the countries differ. Atheism and absolute materialism thrive in the large centres of England, but can find little or no footing in the north. A few who have come from England and settled in Scotland, holding the doctrine of *no God*, have again and again endeavoured to form societies and manufacture lectures, but have always failed. Whenever they require a teacher they are always obliged to send to the south for him. Now, why is this? It is because the Scotch, gifted with mind power, and intellectual acumen quite superior to that of the southerns, have been able to pierce through materialism, and have came into contact with the great infinite spirit beyond atheism. Englishmen are atheistic, and materialism can thrive among them because they are not great thinkers; the Scotch *are* strong, piercing, common-sense, thinkers, and recognize a thinker above them. And that they are far ahead of the English in philosophical ability, the English themselves are always ready to admit. Go to London and you will find that the men who are the leaders of thought there are all Scotchmen both by birth and habit. The premier is a Scotchman, Baxter is a Scotchman, Dr. Parker, Dr. Raleigh, and Dr. Binney all had their cradles rocked among the northern mountains; and while Scotch clergymen are received with open arms in the south, it is almost impossible for an

English preacher to attract a Scotch audience. Once when Spurgeon had taken a preaching tour in Scotland he returned to London quite disappointed, and declared to his people that while the English were moved often to tears under his sermons, the only excitement he had noticed in the churches in which he preached in Scotland, was the handing round of Sandy's snuff-box. The great English preacher was right. The Scotch are an intellectual people, and are very cautious and slow to act and form acquaintances; the English are an emotional people, easily moved in their feelings, and full of commercial enterprise. If you read the history of the civil wars between the two countries the same traits of character come to the surface. At Bannockburn, Bruce, calm and calculating, strong of will and far-reaching in thought, had only 8,000 men fresh from the hills and deep ravines of his native home, and yet he succeeded in sending proud Edward's 60,000 trained soldiers back to their southern homes with an immense loss. The Scotch were never really conquered; they sometimes lost battles, but this was owing to their leaders who had been bred at the English Court, and quarrelled among themselves. The country as a country, small though it is, was never conquered, and never would there have been a United Kingdom, but for the fact that at the death of Queen Elizabeth the English Crown was given to the Scottish King. Now, what is it that underlies the difference of character between the two countries? We answer that it is chiefly attributable to food. The English live very much like the French. They set sumptuous tables, and live chiefly on animal food, which, while it gives them bulk, does not make bone. On the other hand, the Scotch, as a nation, live chiefly on oatmeal and other solid substances, and thus, while they as a general rule are not so bulky in body, are more bony, have firmer and clearer mind-power, learn to look before they leap, and are sterling in peaceful qualities of character. Dr.

Johnson, who had an innate prejudice against the Scotch, in defining the term "oats," said, "In Scotland it is food for men and in England food for horses." "Very true, Dr.," replied a lady who heard the definition, "but where will you find such men, and where will you find such horses?"

We have thus heaped illustration upon illustration to prove the strength of our position. More might be added, but we must close. Let mothers, except of course those who have immoral tendencies in themselves, nurse their own children; and when children are past the age of needing milk, let them be taught to take into their systems that food which gives brain, bone, and muscle to the body, and which, acting upon the mind, originates moral qualities of the highest order. Let individuals do this; let parents and families do this; let society do this; we shall thus be rearing up throughout the land a race of undaunted, strong, vigorous, healthy, honest-principled men, able to rule and willing to obey, and who will be entirely free from those weaknesses and aberrations of character which must necessarily flow from the indulgence in those soft adulterated luxuries, indulged in by the less intellectual races of mankind.

THE LAWS THAT CONTROL THE LINES OF THE HUMAN FACE.

As the letters of the alphabet are the elements of written language, and when we understand their combinations, we have a key to unlock the treasures of knowledge contained in books, so the various lines, the convexities, the concavities of the human face are as so many letters by which those who understand them can read at a glance the intellectual and moral character of those in whom they appear. But this facial expression is a language not quickly mastered; it is a study to last a life-time; for ever and anon there are, and will be new marks to discover and interpret.

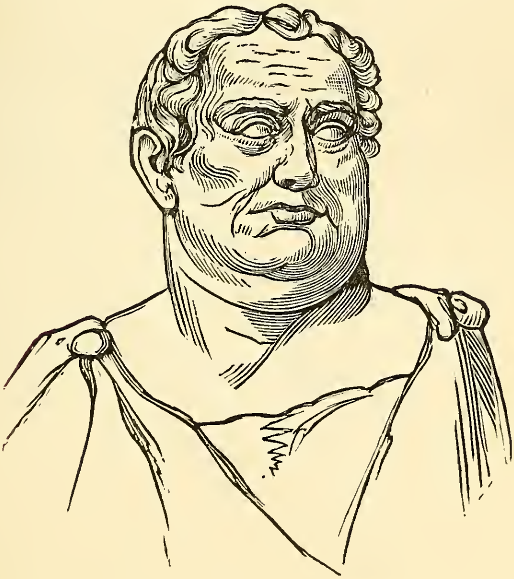
There are, however, several distinct varieties of general structure, which produce corresponding characteristics and facial expressions in all. For instance, the bony structure produces the rough and homely, not to say ugly face. But to me these plain countenances appear like countries whose mountains and ravines reveal nature in features of sublimity and grandeur. Level or slightly undulating landscapes are called pretty, so are smooth faces. But the mountainous country is that which conceals treasures of gold, silver, precious stones, and useful metals; so the rough faces indicate solid character and sterling worth—powers which, like the mines and quarries of mountain ranges, are worth working, and will yield a rich return. Witness Michael Angelo, Galileo, Julius Cæsar, Christopher

Columbus, Andrew Jackson, Sir Robert Peel, and Abraham Lincoln, all specimens of the bony type.

The rounder lines of the muscular structure are the result of physical exercise, and stand as a register in nature's account book to the credit of the individual or race whose industry traced them there.

I shall now describe particularly the lines that belong to each of the five kinds of structure.

1. The *Abdominal.* This make appears conspicuously in aquatic animals. In the human subject, it gives short horizontal lines on the forehead, as here indicated. These lines or wrinkles are straight in some persons, while in others they are irregular and broken. In mature years, however, they are always short. This structure also produces wrinkles running round the neck and ears. It gives



Aulus Vitellius, a licentious and cruel Roman Emperor.

a certain roundness and smoothness to the whole body, with a few well-rounded lines, usually including a curved one about the mouth. It gives, especially in childhood, circular creases more or less deep about the wrists, elbows, knees, knuckle-joints, and across the chest. The lines of the face are less marked, owing to the adipose tissue which fills it up, and produces dimples rather than wrinkles. What lines you discover are not sharp at their inward or bone direction, but are round in their deepest part. These are pretty sure signs of eating, sleeping, and enjoying animal life. Those who exhibit them usually possess excellent organs of assimilation, and their secretions are carried on quite freely. When the abdominal structure is greatly predominant, we have an individual more animal than intellectual; fond of the pleasures of the table, and a trifle selfish.

2. The *Thoracic* structure—evinced by a broad chest, large nostrils, wide cheek-bones, full and capacious throat. It abounds in electricity, and produces fewer lines than any other; for it is the fresh, youthful make of active, impulsive natures, not steady enough at any one pursuit to acquire the wrinkles which, as we shall see, are the product of continued application.

3. The *Muscular and Fibrous* structure—abounding, as its name imports in muscle, and evincing itself by physical force. Here will be found perpendicular wrinkles in the lower forehead just over the nose, and running nearly parallel with the facial muscles. (See cut of S. Judas Thadeus on page 61.) In that cut, observe a well-marked example of muscular wrinkles on the face. They run up and down the cheeks, neck and arms, in correspondence with the facial muscles; but it is to be noted that the orbicular muscles are not thus marked, being light and thin they are not apt to form wrinkles unless they are formed transversely to the direction of the muscles. These

muscular lines are deeper than any other, and are conspicuous when the individual is strongly under the influence of grief or joy. They generally indicate pacific and good-natured people; for a man who is unusually strong is generally peaceably disposed. Such are likewise labour-loving people; for whenever any natural form or make is strongly predominant, there is an instinctive desire to exercise and increase it.

4. The *Osseous or Bony* structure—remarkable for formative power. It has curved lines, but not so deep as those of the muscular, and their general tendency is to be longer and more angular. People having this class of wrinkles will love to ride better than walk, as they thus exercise the bones rather than the muscles.

5. The *Brain and Nerve* structure is indicated by long lines about the forehead, long also from the eyes downwards. People of this make are not generally desirous of money, or anxious to accumulate property, but they intensely love study; they want to read and think. Nor only so — they *have* thought closely and deeply before those long lines could be fully developed. You cannot find them in the youthful face;. they are the tokens of long application, close study, and great mental power.

No disposition or exercise, whether of body or mind, produces such long wrinkles as this thoughtfulness. You cannot find a man who has for years been a deep and close thinker, but he shews long and continuous wrinkles across the forehead; also lengthened and well-marked lines proceeding outwards from the eyes. There will usually be well-marked eye-lids, and a tendency to form wrinkles parallel with the attachment of the lower eye-lid to the face. So, whenever you see a man with a great head, large eye, long nose, and shrivelled appearance of the skin about the upper part of the face, be assured that his has not been a life of ease or sloth; for these tokens bespeak intense, consecutive thought and mature understanding. Long wrinkles indicate what is meant by a "long head"—a far-seeing mind, made so by nature at first, but developed and matured by years of thoughtfulness.

It is important distinctly to understand the wrinkles peculiar to each form or structure; but sometimes you find several of these blended or mixed in one individual; and the study thus becomes more difficult. When the Brain and Nerve form is combined with the bony, it will produce more wrinkles than any other structure, or combination of structures; but the wrinkles will be less perfect, and therefore less easily recognizable than in the pure Brain and Nerve type.

If we find the whole five types pretty evenly balanced in one person, the lines can scarcely be found unless the constitution has been abused. This harmony, this equipoise seems to efface the lines belonging to each peculiar type.

An observation or two on the general lines of the face may suffice in conclusion.

Facial lines or wrinkles are the roads over which time has wrought his experiences, and those who possess them have always been hard workers, either for good or evil.

The smooth face denotes ease, indolence, and pleasure. The possessors of such are seldom thoroughly honest, and are not often found arriving at eminence. The men and women who have made their mark on other minds, wherever they have been, have been ploughing their own faces with lines never to be erased; but such lines are not found in the children of ease and idleness.

The lines produced by the workings of scorn, grief, joy, mirth, happiness, pain, disappointment, mark the countenance only for a time, except where the condition is long-continued. If a person has been in bad health for years, the entire face will display wrinkles, but not of the regular characters we have described above.

If a person is of gloomy disposition, the lines will run downwards like the feelings within; while the opposite will be the case with an individual full of hope and healthy life. In joyous subjects the lines run upward; but if outward and downward, there has been much sorrow. The downward curves of a gloomy countenance are seen in the imprisoned convict; the upward ones in the blooming, thoughtless youth, with whom life is in its freshest condition.

The lines which run straight across the forehead are indifferent evidences of moral worth; while those that dip in the middle are good signs, found only on persons of estimable character.

The lines, the curves, the angles, are so many marks in nature's record of our conduct. The lines produced by crime are downward; those traced by good actions run upwards; like the soul within, looking up for help and support, our good actions make their marks to indicate the upward tendency of our lives.

Now, the reader may think these matters very difficult—all but impossible to master. What if you should live to see the day when a school for teaching them should be successfully conducted and gladly supported?

EFFECT OF ALTITUDE ON THE HUMAN MIND AND BODY.

THIS is a subject of such vital and paramount importance, that we intend to enter into it so fully, that every one of ordinary intelligence may be able to appreciate the facts and reasons, so as personally to apply them, and become the intelligent instructors and guides of all who come within the sphere of their influence.

Let us then first consider the qualities and influence of the atmosphere. All the continental waters come to us from the ocean. If they are fresh and sweet, it is because they have passed through the great laboratory of nature, by the simple process of distillation, which is the first fact to be specially pointed out.

The Sun, the great awakener of life, shoots his burning rays every day athwart the face of the waters; he causes the invisible vapours to rise, which, lighter than the air itself, unceasingly tend to soar into the atmosphere. In their ascending movement, they encounter the colder layers of the higher regions, which have a cooling influence. They are condensed in vesicles, which become visible under the form of clouds and fogs. Then borne along by the winds, whether invisible still, or in the state of clouds, they spread themselves over the continents, and fall in abundant rains upon the grounds which they fertilize. All the portion of the atmospheric waters not expended for the benefit of the plants and the animals, or carried off anew into the atmosphere by evaporation, returns by the springs and rivers to the ocean whence it came.

Thus the waters of the ocean, by this ever-renewed rotation, spread themselves over the lands; the two elements combine and become a source of life, far richer and much superior to what either could have produced by its own forces alone. But we see the earth and the water, the continents and the oceans, touch each other only at their margins. A more intimate action upon each other is only possible by means of the most mobile of the elements, the atmosphere, which performs in nature the part of a mediator. The winds are the agents in this important work,—the carriers of the water which unceasingly renovates the face of the lands, and sustains its beauty. The inhabitants of the arid desert can alone tell us how to value this treasure of revivifying moisture. Still let it be carefully remembered, that the more elevated regions receive the more purified air, with its burden of more purified vapour. Hence the mental and bodily vigour attained in elevated regions, within certain limits, is proportionally of a more elevated order than can be attained in a more impure and heavier region in depressed situations.

Now, let us look at the terrestrial distribution of our race, with special reference to the elevation and climatic conditions of its habitat.

Man, among the inhabitants of the earth, forms a striking exception to the general law of distribution and development. He is not found in his most perfect type in the tropical regions. The tropical man, far from exhibiting that harmonious outline, that noble and elevated form, and all those perfections which the chisel of a Phidias or of a Praxiteles has combined in a single individual, displays that figure which approaches near to the lower animal, and betrays the instinct of the brute. If, then, the distribution of the human races on the surface of the globe does not follow the law of the rest of nature, what is the law, let us try to point out, which regulates it? This is one of the most important problems in nature. I do not intend to enter into the discussion of this question here, but merely to state and verify the fact that, while all the types of plants and of animals gradually decrease in perfection from the equatorial to the polar regions, in proportion to the temperature, man presents to us his purest and most perfect type at the very centre of the temperate regions of the great land-hemisphere, almost in the middle of the great north-eastern continent, in the regions of Iran, of Armenia, and of the Caucasus; and departing from this geographical centre in the three grand directions of the lands, the types gradually lose the beauty of their forms in proportion to their distance. At the extreme points of the southern continents we find the most deformed and degenerate races, the lowest in the scale of humanity.

Now, let us take a type from the central region of Western Asia—the Caucasian. In this we are at once struck with the regularity of the features, the flowing, easy grace of the lines, and the perfect harmony of the whole figure. The head is oval; no part is obtrusively prominent; nothing salient or angular disturbs the softness of the lines which surround it. The face is divided into three equal parts by the line of the eyes and that of the mouth. The eyes are large, well cut, neither too near nor too far from the nose; their axis is placed on a single straight line at right angles with the line of the nose. The stature is tall, lithe, and well-proportioned. The length of the extended arms is equal to the whole height of the body; in a word, the proportions reveal that perfect harmony which is the essence of beauty. Such is the type of the white race—the Caucasian, as it has been called—the most pure and perfect type of humanity. Their average elevation above sea level is 2,000 feet, hence pure and invigorating, but not too rare, is their lung-food.

In proportion as we depart and descend from this geographical centre of the races of man, the regularity diminishes, and the harmony of the proportions disappears. Follow the dispersing races, first, in the direction of Europe and Africa. Although the European may be considered as belonging to the central race, his features have less symmetry, but more animation, more mobility and expression. In him beauty is less physical, but more moral and intellectual, which may be accounted for by the superior freedom with intellectual and spiritual culture.

Passing into Africa, we find the Arab, who, whether in his own country or in Algeria, shews degeneracy in both his cranial and facial features. The degeneracy gradually increases as we proceed southward, and may be traced through the Galla of Abyssinia, whose hair begins to crisp; the Kaffir, with woolly hair, and lips like the negro; and the Hottentot, who long was considered the most degraded specimen of humanity. Then look to the other coast of Africa, still farther from Asia, and you find the degeneracy of form still more rapid. The Berbers of the Atlas evidently belong to the Caucasian race; but, nevertheless, in the prolongation of the head, the pouting of the mouth, their spare meagre forms, and their deeper colour, they indicate a marked degeneration. The Fellatahs of Soudan, and still more the inhabitants of Senegal, bring us to the type of the Congo Negro. In him the retreating forehead, the prominent mouth, thick lips, flat nose, woolly head, strongly-developed occiput, announce the overwhelming preponderance of the sensual and physical appetites and propensities over the nobler faculties. And then, at the extremity of Africa, the miserable Bushman is still lower than the Hottentot.

Now we turn to Eastern Asia to point out the marked decadence of the human species in their descent from the pure and elevated cradle of the race. Towards the level of the sea, the great receptacle of terrestrial impurities, as the race descends, the more debased has it ever become. But more on this point when we come to enumerate some of the centres of immorality and decay that may be visited on our great rivers by the sea.

From the Caucasian region, as far as the extremity of Australia, the decreasing beauty of the human form is not less perceptible or less gradual than towards the extremity of Africa. Here we see the Mongolian with his prominent cheek-bones, eyes compressed and wide apart and elevated at the outer corners, and the whole figure wanting in harmony throughout. Then the Malays, who seem to have sprung from a mixture of the Mongolian and white race. The Papuan of New Guinea, with still some lingering advantages of form. But the South Australian with his gaunt body, his lean members, bending knees, hump back, projecting jaws, presents the most melancholy aspect that is found in human form.

In our rapid suggestive general survey, we now come to America. Here the same law shews itself. The face of an Indian chief has some advantages, but the prominence of the cheek-bones, a slight elevation of the outer angle of the eyes, and the size of the jaw, clearly betray a degenerate nature. In the South American Indian all these defects are still more exaggerated, and give to the races of the south, compared with those of the north, a very marked character of inferiority. Finally, at the extreme point of the continent, and in the wretched Island of Tierra del Fuego live the Pesherais, the most misshapen, the most mentally degraded, and the most wretched of all the inhabitants of the New World.

The same law holds good in advancing towards the poles. Passing the Finns, we arrive among the Laplanders; through the Mongolians we reach the Tungusians, the Samoiedes of Siberia, and the Esquimaux of North America.

Thus, in all directions as we remove from the pure elevated seat of the most perfect and beautiful human type, the degeneracy becomes more strongly marked. Let us now draw a few deductions from these remarkable facts observable in the distribution of the human race.

1. The continents of the north, which constitute the central mass of the lands, are inhabited by the finest races and present the most perfect types; while the continents of the south, forming the extreme and far sundered points of the lands,—as it were long wedges driven into the ocean—are occupied exclusively by the inferior races and most imperfect representatives of human nature. This contrast is more decided in the Old World than in the New; nevertheless, in the latter, notwithstanding the general inferiority of the copper-coloured race, we have seen that the man of the north—the Missouri Indian—has a marked superiority over the Indian of the south, over the Botocudos, the Guaranis, and the Pesherais of South America.

2. The degree of culture of nations bears a proportion to the nobleness of their race. The races of the northern continents of the Old World are alone civilized, while those of the southern continents have remained savage. In America the civilized Aztecs of Mexico came thither from the north. The ancient civilization of the Incas (or Quichuas) on the table-lands of Peru scarcely seems indigenous to South America. But, it must not be forgotten that the land itself, by its elevation, belongs to the temperate zone, averaging more than 4,000 feet above sea level.

Now, these differences between the north and the south are not of to-day nor yesterday. If we glance at the memorials of these tribes, without written history, meagre as they are, it might seem that it has been the same from a time before all our traditions or histories if the Bible is excepted. No indication brings to light in these tropical continents the existence, at another epoch, of a purer type, of a more perfect race of men, than the degenerate and inferior form we there meet with at the present day. The annals or traditions of the tribes, in no part of these continents, record either the birth or the progress of a civilization which has contributed to the development and progress of our race. Man has there remained always at the bottom of the scale of civilization; while, from the earliest days of the world, history marks out the temperate and more elevated continents as the seats of the cultivated communities. As there is a temperate hemisphere and a tropical hemisphere, so is there a corresponding civilized hemisphere and a savage hemisphere.

Without pursuing the subject, I may just hint here that the distribution of man on the globe, and that of the other organized beings, are not founded on the same principle. In all organized beings, except the human, the approach to perfection of the types is proportional to the intensity of heat and of the other agents which stimulate the display of physical life. But in man the approach to perfection of the types is in proportion to the degree of intellectual and moral improvement. This is a law of moral order, just as the former is a law of physical order.

Now, since this subject is not only absorbing but intensely interesting, let me direct your attention, as briefly as possible, to the fact that the continents of the north are the theatres of history and every kind of development. They are Asia, Europe, and North America.

The result of the comparison which we have made between the northern and southern continents, in their most general characteristics, seems to be that, what distinguishes the former is, not the wealth of nature and the abundance of physical life, but the aptitude which their structure, their situation, and their climate give them to minister to the development of man, and to become thus the seat of a life much superior to that of nature. The three continents of the north, with their civilized peoples, have appeared as the *historical* continents, which form a marked contrast to those of the south, with their savage tribes.

We know that the condition of an active, complete development, is the multiplicity of the contrasts, the differences, the springs of action and reaction, of mutual exchanges which excite and manifest life under a thousand diverse forms. To this principle corresponds, in the organization of the animal, the greater number of its special organs; in the organization of the continents, the variety of the forms of the land, the strongly characterized districts, the nature of which stamps upon the people inhabiting them a special seal, and makes them so many distinct individual bodies.

Hence we expect to find the great fact of the life of the nations connected essentially with those differences of soil and climate, and with the contrasts which nature herself presents in the interior of the continents; and that the influence of these differences on the social developments of man, although variable according to the times, is evident in the periods of his history.

The true theatre of history is the great north-eastern continent, comprising Asia and Europe. We direct attention to the unity and physical plan exhibited in this grand triangular mass, which, in a natural point of view, forms a single continent. The subdivisions bear the imprint of mere secondary differences. The most remarkable trait of its structure is the great dorsal ridge, composed of systems of lofty mountains traversing it from one end to the other, lengthwise, which may be regarded as the axis of the continent. It is in fact that on the two sides of the long chain of more than 5,000 miles on the north and south of the Himalaya, of the Caucasus, of the Balkan, the

Alps, and the Pyrenees, the high lands of the interior of the continent extend. It splits the continent into two portions, unequal in size, and differing from each other in their configuration and climate. On the south the areas are less vast, the lands are more indented, more detached, and, on the whole, perhaps more elevated; it is the maritime zone of the peninsulas. On the north, the great plains prevail; the peninsulas are rare or of slight importance, and the ground less varied.

But that which chiefly distinguishes one of the two parts from the other, and imparts to each a peculiar nature, is the climate. Those lofty barriers which have been just named, almost everywhere separate the climates as well as the areas. The gradual elevation of the terraces, from the north towards the south, up to the ridge of the continent, by prolonging in the southern direction the frosts of the north, augments still further in Eastern Asia and in Europe the difference of temperature between their sides, and renders it more sensible.

Thus two opposite regions are confronted, one on the north, in the cool temperate zone, with its vast steppes and desert table-lands, its rigorous and generally dry climate; the other on the south, in the warm temperate zone, with its beautiful peninsulas, fertile plains, blue heavens, soft climate, delicate fruits, trees evergreen, and lovely smiling nature everywhere.

The contrast of these two natures must have a great influence on the people of the two regions. It is repeated from the history of the very earliest ages in the most remarkable manner. In the north, the arid table-lands, the steppes and the forests, lead men to the life of shepherds and hunters; the people are nomadic and imperfectly cultivated. In the south, the fruitful plains and a more facile nature invite the people to agriculture; they form fixed establishments and become civilized. Thus, in the very interior of the historical continent, we find, placed side by side, a civilized and a barbarous world.

As far as the memorials of history ascend, they shew us, on the table-land of Iran, one of the earliest civilized nations, the ancient people of Zend. The Zendavesta, the sacred book of their legislator, displays everywhere deep traces of the conflict of Iran—the *good* and *civilized*—with Turan—the *evil*, dark, and barbarous inhabitants of the low regions around. Thus, clearly shewing that the purer elements of nature contributed in remotest antiquity to develop and elevate the human being enjoying their advantages. In China and India we have parallel examples of the effects of elevation on the lofty table-lands of these vast countries. *There* were developed the two great cultivated nations of Eastern Asia, whose perfected languages, rich literature, and wonderful skill in art and science remain as amazing monuments of their intellectual and physical development.

Let us observe, in passing, that Eastern Asia is pre-eminently a country of contrasts, of isolated and strongly characterized regions. In perfect responsive accordance with these natural features of the earth, we find the characteristics of the man who occupies the soil—the Mongolian race. In this people the melancholic disposition seems to prevail; the intellect, moderate in range, exercises itself upon details, but never rises to the general views or the high speculations in science and philosophy. His ideas are wholly turned to things of earth, but the world of ideas, the spiritual world, seems closed against him. His whole philosophy and religion are reduced to a code of social morals for the regulation of human conduct, such only as merely renders society possible. The Chinese again, being by nature closed in, have carefully adhered to the patriarchal form of society; but the white race of India, sprung from the west, have developed a civilization wholly different, the qualities of which are explained at once by the influences of the soil and the climate. The Hindoo is endowed with higher intelligence, with a power of generalization, with deep spiritual feeling, whereas the Chinese neither knows nor cares for a spiritual life. The pure air, the vast mountains and rivers of Upper India have so operated on the race, that it would seem that the material world disappears from their eyes. In their literature, so rich in works of high philosophy, of poetry, and religion, we seek in vain for the annals of their history, or any treatise on science, or any collection of practical observations, so numerous among the Chinese. One thing ought not to be forgotten in considering these eastern civilizations. At a very remote era they had attained to their utmost in their several civilizations, but then they progressed no further. The great obstruction seems to be the isolation of each great community, arising from the impassable barriers that the land forms have placed between them. The wonderful contrast to this natural conformation will be very striking when we notice the amazing facilities afforded by the New World.

Now, glance for a moment at the conformation of true Western Asia—the Asia of history. It consists of a plateau, on the south of the great central ridge, and enjoys a fine climate, while it is flanked by two plains. If Egypt be added to it, this region will comprise all the great countries of ancient civilization of the centre of this continent. Here is the original country of the white race, the most perfect in body and mind. Their original habitat was in the very centre of this vast salubrious plateau, around the pellucid head streams of the great rivers, along whose banks descended the ancient Assyrians and Babylonians, keeping respectively along the Euphrates and Tigris, on which they built Nineveh and Babylon, whose history is too well-known to be more than simply mentioned here, for the sake of observing that their fate, in becoming great sinks and centres of moral pollution and degradation, has been ever since the history of cities founded on large streams in low situations where natural impurities accumulate, and so affect body and mind, to sap the pure and healthy action of each. National decadence is first seen in city luxury and sensuality.

Let us now glance at Europe, which has a character quite special. The giant impassable natural barriers to intercourse which abound in Eastern Asia are almost wanting here. The whole continent is accessible, and better formed and fashioned for the development of the human being. This has been the continent most favoured, considered in respect to the education of man. More than any other in the old world, it calls into play his latent forces. No other continent is more fitted, by the numerous physical regions it presents, to bring into being so many distinct and different nations and peoples, as well as to increase their reciprocal influence and stimulate them to mutual intercourse.

Now, we glance at North America, the third continent of the north. Its aspect differs entirely from the other two. The New World's two continents are not grouped in one mass, or placed side by side, but touch only at their exterior angles, standing in line rather than grouped. Besides, they are rendered still more distinct from each other by being situated in two opposite hemispheres. North America's characteristic is that of great simplicity of structure. Add to this its vast areás, fruitful plains, numberless rivers, prodigious facility of communication, nowhere impeded by serious obstacles, with its oceanic position, and we can perceive that it is made, not so much to give birth and growth to a new civilization, as to receive one already formed, and to furnish for man, whose education the Old World has well begun, the most magnificent theatre, the scene most worthy of his activity. It is *here* that all the peoples of Europe may meet together, with room enough to move in, may commingle their efforts and their gifts, and carry out upon a scale of grandeur hitherto unknown, the life-giving principle of modern times—the principle of free association.

Now, having rapidly pointed out the great leading physical causes that contribute to the formation and development of the human body and mind, as it regards nations and communities, let us look at a few of the more local and minute causes affecting the mind and its wonderful index, the face and form.

In all attempts to cultivate body and mind, we should never lose sight of the indispensable and absolutely necessary elementary sustainers of healthy action in both. First, then, we mention pure air as the element of primary importance, as not a moment can pass in life in which we can dispense with this sustaining fluid. As the atmosphere is a fluid of great compressibility and expansibility, and readily combines with other gases, holding them in solution, it is most important that we should inhale the air that may be as free from deleterious matter as possible. In all liquids holding in solution impurities, those heavier than the liquid will be precipitated, while those that are lighter will either escape at the surface, or become apparent as floating impurities. As a general rule, the atmosphere becomes purer the higher we rise in it, when it is unconfined. Poisonous gases and effluvia that are deleterious to human life have such specific gravity, that they descend and become the breath or food of plants. Those of large lung-power in health can breathe comfortably at a mean elevation of 6,000 feet above sea-level; but the best average height for vigorous respiration is considered to be between 3,000 and 4,000 feet.

The next great essential of life is *pure water*. It is ot immense importance that this element should be pure; and much care is necessary in selecting and analyzing water;

for it holds in solution many most dangerous ingredients, both organic and inorganic. Before using water from either a well, or spring, or stream, we should carefully ascertain its purity by carefully testing it. As a general rule, the further from and above the sea we find a spring, it is the purer, especially when it wells from the limestone or ironstone rock. But care in the selection of pure water, as well as pure air is much enhanced when it is considered that purity of mind as well as body depends essentially upon due use of these great sustainers of life.

People living on low, flat, or depressed lands are well-known to be subject to fevers, jaundice, derangement of the portal system, Asiatic cholera, &c., while those who dwell among the mountains scarcely ever are assailed by these deadly enemies of human life. Cholera almost always originates at the mouth of the Ganges, where this immense river pours its waters into the sea, and deposits over its extensive delta the fearful amount of rotting vegetable debris and putrifying human remains which the superstitious dwellers along its 4,000 miles of banks are ever and anon committing to its impetuous torrent. Look now to New Orleans and the country forming the long line of flats between that pestilential city and the Gulf of Mexico. This is a hot-bed of yellow fever. The reason of the deadly nature of this district is not far to seek. All the central part of the North American continent is drained of its impurities by the Ohio, Missouri, and Mississippi rivers, with their tributaries, and carried down into the hot and impure air of these vast swamps, where it soon breeds that terrible scourge. Carbonic acid gas, when cool, always subsides and seeks depressed or neap ground as a resting-place, where it contaminates the vitals of those who are sufficiently unfortunate to inhale this deadly poison. Fresh water will receive its own weight of carbonic acid gas, which it carries by river to the salt water, only to be thrown out upon the air, to vitiate and debase it, and empoison the blood of those who inhale it. Thus we perceive how it arises that all the dwellers upon low lands are more subject to fevers (especially fever-ague) than the inhabitants of elevated lands. The people who live in low countries are more or less depressed in their higher natures by the impurities which they breathe, as well as by the depressing monotony of the scenery. It is a law, that whatever affects the body affects also the mind. The debilitating effect of impure air and water conduce to stimulate the animal and depress the moral nature of man. This same law operates in causing the inhabitants of uplands to be more thoughtful and less animal than those who dwell on the marshy and paludal soil. This same thought-principle would raise and define the nose, chasten the lips, and mark clearly the eyes' form, as well as its expression. A striking example of this may be seen in the African face, which, in its flatness, reflects the character of the country whence he sprang. The people dwelling along the Amazon of South America are warm in their animal natures, but crude in their mentality. The degenerate Spaniard of Mexico is vigorous of body, ardent in love, stolid in intellectual improvements, while he is debased, and, as a rule, animal.

The physiognomy of the deer, elk, and antelope, are well-defined and expressive, when contrasted with that of the crocodile, rhinoceros, and hippopotamus, as well as other animals of low river-countries, in which feculent air abounds.

This same principle would prove that the people who live in hilly, temperate climates are further advanced in social arts and accomplishments than those whose abodes are in level and depressed countries. The classic hills, groves, and elevated picturesque cities of Italy are the localities whence the instructors of the fine arts press their claims for deserving merit. England, with her level fields of grain, pasture, and woodland scenery, is queen of the seas, and possesses a physical power which the nations of the world care not to dispute. Scotland, with her rugged mountains, deep ravines, and bounding rills, is the birthplace of industry, and sterling peaceful worth. These attributes also depend largely upon the granite in her soil, and the early oatmeal brain-nourishing fare of her sturdy sons, who labour in their youth in the open air, and study as a pastime until they enter college. Let it be observed also, that all their universities are by the sea, or on elevated situations. More eminent men have come from the granite shire of Aberdeen, in proportion to its population, than from any other county in Scotland. The granite character is in their very nature. Ireland, with shamrock ever green, inspires her people with a love of song and liberty. Her natives strongly bear out the observations we have made on the influence of the physical surroundings. The hilly counties and highlands of Connemara produce tall, handsome, keen, active, persevering, intelligent men and beautiful women; while the ungainly baboon-faced, pot-bellied rapparees are the natural offspring of the great central plain and interminable bog-land that occupies such a vast proportion of the country. North America, with her snow-clad peaks and thundering cataracts, in her grand simplicity of natural construction for facilitating every species of mental and material progress, bids away the traveller's monotony, and beckons his thoughts transcendently above the inglorious herd to the mazes and labyrinths of worlds whose splendour and stupendous grandeur fill the sky.

Nearly all great reforms of a moral nature were first started on some mountain or in a mountainous country. The Decalogue was given to Moses on the grand, rugged mountain of Horeb. The Messiah, whose teaching rolled on the chariot wheels of civilization, had His birth in the hilly district near Jerusalem, and most of His teachings were on the top or declivity of a mountain. In ancient times, when a people desired some great good, they were commanded to go up to the mountain tops and pray. They, too, knew the ennobling effect of elevation and pure air of mountain freshness upon the mind and morals of men. There are more Thoracic forms among the inhabitants of mountainous regions than in lowland countries, because the purity of high air necessitates greater respiration in volume, which enlarges the organs of respiration, and the thorax which contains them.

In flat sections, the air seems to encourage the nutritive power, and the people become full of adipose material, and are round, plump, and somewhat inactive. This is the case pre-eminently in Holland, where the inhabitants are often on a lower level than the sea, which is kept from inundating their towns by their famous dykes. On the other hand, mountain-air thickens and cools the blood, arches the upper eyelid, expands the forehead and chest, sharpens every feature, and gives vivacity and action to both body and mind.

In Alaska the Indians are fairer, more thin-lipped, and have higher and narrower noses than the Indians of California, Nevada, Utah, or Colorado. The Stichians and Sticks who inhabit Alaska are quite intelligent, and never use salt. Nor do any of the Alaskians use salt—shewing that salt is an article not positively necessary to the sustenance of man.

The reasoning powers of those who live in pure air are more clear and accurate than of those who dwell in low malarious districts. The atmosphere of low realms excites the animal nature in men, and causes them to talk and think more of the voluptuous and amorous pleasures than those who live in high altitudes with pure air. Where countries are undulating and the waters clear, and brisk breezes fan away incentives to vice, there the soul towers away in the majesty and gloriousness of the noblest nature; whereas the marshes and frog-ponds of mortiferous regions make full cheeks, large necks, dull dark eyes and skin, flat noses, hollowing and narrow foreheads, all of which evince want of intellect, and that the individual is doltish and asinine.

Upon the mountain tops of moderate elevation, the air being fine and subtle, one respires with pleasurable freedom; the body is more elastic, the mind more serene; pleasures become less ardent and the passions more controllable. The grandeur of the scenery inspires sublimity in the mind's meditations. Thus elevated above all animal life, it seems as if one had left every low terrestrial sentiment and had approached the celestial realms of light. The soul feels drinking in full draughts of eternal purity, and one becomes thoughtful without being melancholy, peaceful but not indolent, inspired yet resigned; the passions are more readily subdued, while gentle emotions fill the mind. Hence the passions, which in the lower world are man's most powerful enemy, in a higher sphere contribute to his advancement and happiness.

"Above me are the Alps.
The palaces of Nature, whose vast walls
Have pinnacled in clouds their snowy scalps,
And throned eternity in icy halls
Of cold sublimity, where forms and falls
The avalanche—the thunderbolt of snow!
All that expands the spirit, yet appals,
Gather around these summits, as to show
How earth may pierce to heaven, yet leave vain man below."—Byron.

CHARACTERIZED FROM BIRTH.

WHY were none of us born among savage tribes in Africa? Why was not our lot the dingy complexion and oblique eyes of the Chinese, or the copper hue of the former inhabitants of America? God only knows. We readily admit that there are some conditions of our existence over which we have no control, and for which, therefore, we have no accountability. If a man was born blind, no one blames him for not seeing; if deaf, no one expects him to hear; if idiotic, his want of reason renders him the object of our pity, not of our condemnation. But in a modified degree some are born with inferior intellectual powers, some with perverted moral tendencies, and there is seldom any allowance made for them; while others inherit superior talents or a high moral character, and though they may have bestowed little culture on either, they are praised by others, and valued by themselves. We cannot always account either for the gifts of nature or its obliquities and deficiences. One boy is born with a natural genius for music, another has a passion for poetry, a third delights in mechanics. It may be assumed, as a general rule, that those faculties which the parents cultivate, rather than those which they idly possess, are those most likely to be transmitted to their children. While, therefore, no one is accountable for what he has not received, every one is responsible, not only on his own account, but on that of his offspring, for what cultivation he bestows on his natural endowments, and what check he places on his inherited vices. There is no doubt that if a child is led to follow the bent of his natural abilities, whether these are intellectual or physical, if they are moral and good, he will succeed better and rise higher than he could by labouring in an avocation for which he has no natural fitness. It often happens that certain expressions of countenance in the child bear a striking resemblance to those of the father or mother. This is a sure indication that the child is much like the parent in those traits of character that are manifested in those features; and for this characteristic the parent, perhaps the progenitors for several generations past, have inevitably set the die which has moulded that child. How much education and careful training may do to eradicate hereditary evils, no man can tell with certainty, nor how much may be done by a man's pains-taking with himself when he comes to years of discretion; but all concur in the opinion that though education in youth, and self-discipline in manhood, may mould and influence, yet it will never wholly eradicate the evil arising from pre-natal causes, so that it shall not be ever ready as a root of bitterness to spring up and give trouble. Dr. A. was understood to be an illegitimate son of George IV. He was taught the business of a printer, but coming under church influences in his early manhood, and exhibiting considerable gifts of speech, as well as knowledge, he was induced to become a preacher. How long his better principles prevailed over inherited tendencies we know not; but some time after he had passed the meridian of life, his personal resemblance to his father became striking and unmistakable. Unhappily the disposition to sexual gratification likewise developed, until all bounds of decorum were overstepped, and he resigned the position he had so disgraced. Carrying, however, like thousands of others, his sanctimonious and hypocritical face, he obtained employment through the patronage of a more fortunate scion of the royal house, who was not a Physiognomist.

It is far more easy to cultivate a child that closely resembles both parents, than one in whom little or no likeness can be traced. And as those characteristics which the parents have most cultivated in themselves, are those which they are most likely to transmit, so are they the tendencies most easily susceptible of culture in the offspring. On the other hand, a child who is personally unlike both parents, will not be so accessible to educational appliances; because he does not remarkably inherit the cultivated qualities of either father or mother. If the father has excelled in any laudable avocation, and his son is found personally to perfectly resemble him, it is sure to be right to bring the child up to follow his father's calling. The same rule is applicable in cases of resemblance to the mother. And here comes in the importance of a thorough knowledge of the facial signs and evidences of character. By the tokens they give, statesmen may be developed and embryo poets brought into life. With this unerring aid, one child will be made a mechanic and another a lawyer with the happiest results to themselves, and honour to the parents.

In some countries, all trades and professions are hereditary by law; it being taken for granted that inherited talent and the opportunity of early culture ought to result in superior proficiency. This is true, but with some limitation. We often see a particular talent appear to die out in the third or fourth generation; sooner if the mothers are destitute of it. We have heard of great generals whose sons proved still greater, as Philip of Macedon, the father of Alexander, but the line went no further. So of some eminent authors and musicians. S. W. was the first organist in England, perhaps in Europe. His father had been musical, though not professionally so. His wife was destitute of the talent, and so were his children by her. But he had another *liaison* with a musical lady, and both the sons and daughters of that union proved musicians of superior talent.

It is worthy of remark in passing, how many of those men who have made the most conspicuous figures in the world have left no sons, or none that came to maturity. We need only mention Alexander the Great and Julius Cæsar in ancient times; the first Napoleon, General Washington, and Benjamin Franklin among the moderns; to say nothing of some of our most celebrated historians and poets.

Whatever apparent irregularities there may be in the transmission of certain intellectual talents and moral qualities, it is certain that wherever any particular *physical* organization is required for a special vocation, its perfection can generally be attained only through inheritance. A fine example of this might have been seen forty or fifty years ago among the fishwomen who occupied the village of Newhaven, near Edinburgh. They were accustomed to load themselves every morning with immense burdens of fish with which they walked many miles during the day, uttering cries which could be heard at a great distance. They seldom intermarried with any but the hardy fishermen of the same village; and thus had been formed a race of such stalwart females as made all others appear as pigmies by their side. Some remains of this race may yet be seen; but the facilities of railway transmission have superseded the demands on their strength, the shopkeepers have thus got the best of the trade out of their hands; and as a separate people located in one spot, they have ceased.

On the other hand, the most eminent teachers of dancing in our great cities have inherited the profession through several generations. It would be impossible to make a good dancing-master of a ploughman's son, or a *danseuse* of the daughter of a Newhaven fishwoman. Any one who has had an opportunity of observing the footmen that attend Queen Victoria in her migrations through the country, must have been struck with the singular lightness and rapidity of their steps, reminding one of Mercury, the messenger of the gods, with his winged feet. These servants could not be made out of clod-hoppers by any course of training. They are born of families that have been in the service of princes and nobles for generations back—both men and women accustomed to practice this noiseless elastic movement.

Such are the seeds, moral, intellectual, and physical, which parents sow in their children; and such characteristics as we have alluded to are the legitimate fruit of ancestral virtue or vice, superior or inferior intellectual culture.

CHANGE OF THE HUMAN FACE.

THE beauty and ever-changing expression of an emotional human face has in all ages fixed the attention and called forth the admiration of lovers, poets, and philosophers.

> "Read o'er the volume of his lovely face,
> And find delight writ there with beauty's pen;
> Examine every several lineament,
> And what obscure in this fair volume lies,
> Find written in the margin of his eyes."—SHAKESPEARE.

> "How much her grace is altered on the sudden!
> How long her face is drawn! How pale she looks,
> And of an earthly cold! Mark you her eyes."—IDEM.

> "Her face had a wonderful fascination in it. It was such a calm, quiet, face, with the light of the rising soul shining so peacefully through it. At times it wore an expression of seriousness, of sorrow even; and then seemed to the very air bright with what the Italian poets so beautifully call the 'lampeggiar dell' anglico riso,'—the lighting of the angelic smile."—
> LONGFELLOW.

Every face, however, is not alike transparent to the ordinary observer. But none can conceal the character and propensities of their inmost nature from the penetration and scrutinizing glance of the skilled, scientific Physiognomist. Every man in his age has a soul of crystal through which all men may read his actions; yet some men's hearts and faces are so far asunder, that they try to make it appear that no intelligence is held between them. This, however, is self-deception, very delusive.

Not only is the face of every human being recognizably and perceptibly different from that of every other individual of our species; but every individual face is undergoing various kinds of changes throughout the whole course of life, and thus becoming a physiognomical stereotype plate, as readable to the Physiognomist as the most legible letterpress page is to the linguist. We often hear wonder expressed at the infinite variety, and yet amazing similarity of some one phenomenon in organized matter. No one has ever yet found, on comparison, two blades of grass, leaves of trees, animals, or aught else endowed with life, exactly alike. We sometimes hesitate whether to admire most this endless variety with striking similarity in nature, or the godlike faculty with which we are endowed for its perception and appreciation.

Any law of nature, which is found universally prevalent, may be relied on and universally applied in the examination of natural phenomena and solution of physical problems. Nature never lies when questioned by the honest, candid truth-seeker.

The colour of the eye, in all civilized nations, is of almost every shade; whereas, among barbarous tribes and uncivilized nations, the colour is, almost without exception, the same in every individual. On whatever principle this may be accounted for, we find the fact to be, that the tribes and nations of uniform colour of eye are gradually disappearing before the peoples of the many-coloured eye. The most remarkable instances of this are the gradual disappearance of the Celts from all the western countries of Europe; the Indian tribes, from the American continent, and the aborigines from all the islands of the Pacific. The Physiognomist of the past was not capable of comprehending the present age; for the human face changes with the ever-changing exigencies of the times and nature. This law of change runs through all nature, and is applicable to this science in a pre-eminent degree. The observations I am making are true for this age; but, owing to the changes which are gradually and incessantly taking place in mankind, and necessarily affecting the "human face divine," the rules applicable now may not be pertinent in fifty years hereafter, except as they must be changed to coincide with the shifting phases of the panoramic mutations of kaleidoscope facial phenomena. The only plan, then, is to keep investigating until you become thoroughly imbued with the phenomena of the passing age, and perfectly conversant with its distinctive characteristics.

Forms are ever changing. Fifty or a hundred years ago they were very different from those of the present day. Consequently, so are the dispositions and aspirations of the people. But in the coming time, the changes will be much more rapid than in past ages. Since the invention of printing, everything intellectual has been progressing in a geometrical ratio; but since the independence of the United States of North America; the invention of the Magnetic and Electric Telegraph; the Morse system of recording messages; the introduction of the Hoe printing press; and the consequent almost universal diffusion of every species of knowledge, one year in this age (1873) is more than equal to a century five hundred years since. This amazing rapidity in all intellectual stimulants and appliances must, and has affected the human face to such a degree, that it can only be appreciated by the connoisseur in pictorial and sculptural art. The rapidity of the change is astonishing; and the reason might be given, but the ordinary mind is prepared for only part of the truth at present. The rest shall be retained for another and future occasion, as I intend to write on this theme again. In a brief article like the present, this vast and absorbing subject cannot be exhausted.

The change of the human face, from birth to old age, is one of the most remarkable of natural phenomena. Nothing in nature presents to the investigator of her beauties germs so capable of expanding the thoughts by study, as this change in the face of the human creature. In every person the subject may be easily illustrated, for every one has to pass through the same ordeal. The infant has a round dimpled face with a body soft in all its parts. As age increases, it grows hard in bone and muscle; lines become discernible, and the countenance, changing, gives more expression to the face, which, by and by, exhibits indelible marks as records of vice or virtue, past and present, that give to the individual a fixed and idiosyncratical expression by which he can be recognized and distinguished from every other human being. But the animal kingdom does not present to the observer such a variety of expression. Such sameness of countenance obtains among the lower animals of the same species that, were it not for some peculiarity, such as colour, or form, or size, it would be impossible to distinguish them. Take a flock of white sheep and try the experiment. This difficulty is acknowledged and attested by the universal practice of proprietors marking the animals of their flocks, herds, and piggeries with their own initials, so as to be able to identify them when mixed with other flocks. Very different is the feeling about the members and individuals of the human family. Who ever heard of a person being marked that he might be recognized? The amazing variety and instantaneously recognizable peculiarity of face specially belonging to every one precludes the slightest necessity for any other distinction. The most casual observer can see no two alike; but it is worthy of remark that, the higher we rise in the grade of intelligence and intellectual development, the more easily is the individuality recognizable by physiognomical expression. Compare the faces of men of mark, who have held high positions of public trust and great responsibility, with those who are mediocre individuals who have jogged on through life in an even, monotonous course, and you will at once perceive how easy it is to recognize the men of distinction from those of the common level in life.

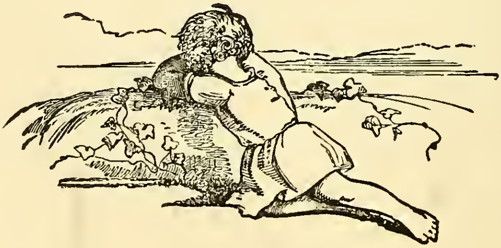
Nature's noblemen, the aristocracy of goodness and intellect, are ever more easily and readily distinguished than the commonalty. How readily men of gigantic intellect are known by even a common photogram, no matter how poorly it has been taken. For instance, Shakespeare, Milton, Washington, Lincoln, Greeley, Grant, Burns, Sir Walter Scott, Gladstone, Disraeli, Spurgeon, with hundreds of others, who have occupied positions of such eminence that every one has become familiar with their faces. A few lines etched by a skilled physiognomical artist will render such a face as Greeley's at once recognizable, whereas, when you descend in the scale of intelligence and intellectuality, you find that faces become less marked, until they become nearly as undistinguishable as sheep, as in soldiers of the regular or standing army of the European nations. Such also is the case in families in which nothing has disturbed the monotony of the ever-recurring daily routine of existence. These all become almost as like as twins. Descend still further, to the savage tribes, and there, on a cursory inspection, you feel disposed to think them all perfectly alike. The horse is more intelligent than the ox or hog, and less variety of physiognomical expression is perceptible in the hog or hippopotamus than in the horse. This is simply another proof that, in proportion to the development of intelligence, the more perceptible is the variety of countenance.

The change of countenance is not so great in youth as it is between the ages of twenty and thirty, unless it has been previously affected by sickness. So intimately connected are all the parts of the body that, whatever affects one part of necessity affects every other part. If the frame is dwarfed, the parts are similarly affected. Those who understand this can tell how each part is affected by age, disease, or education, for all are alike affected by change. I will not say, in this chapter, what effect each part exercises over the others, though this is very important to be well understood; for in that branch of Physiognomy much depends on circumstances.

" A sweet attractive kind of grace;
 A full assurance given by looks,
Continual comfort in a face,
 The lineaments of gospel books;—
I trow that countenance cannot lie,
Whose thoughts are legible in the eye."—SPENSER.

"The cheek
Is apter than the tongue to tell an errand."—SHAKESPEARE.

"The cares, and sorrows, and hungerings of the world, change countenances as they change hearts; and it is only when those passions sleep, and have lost their hold forever, that the troubled clouds pass off and leave heaven's surface clear. It is a common thing for the countenances of the dead, even in that fixed and rigid state, to subside into the long-forgotten expression of sleeping infancy, and settle into the very look of early life; so calm, so peaceful, do they grow again, that those who knew them in their happy childhood, kneel by the coffin's side in awe, and see the angel even upon earth."—DICKENS.



COMMON SENSE.

> "Common Sense is the complement of those convictions or cognitions which we receive from nature, which all men possess in common, and by which they test the truth of knowledge and the morality of actions; the faculty of first principles; such ordinary complement of intelligence, that if a person be deficient therein he is accounted mad or foolish; native practical intelligence; natural prudence; mother wit; tact in behaviour; acuteness in the observation of character, in contrast to habits of acquired learning or of speculation."—SIR WM. HAMILTON.

IN an ingenious and forcible article on the theory of Common Sense, Dr. W. B. Carpenter maintains that this fine mental power consists in the capacity to bring all the results of pertinent experience to bear upon any question which is submitted to the decision of the judgment, to which exercise it is, of course, necessary that the mind should instantaneously discriminate between those experiences which are, and which are not relevant to the matter in hand. One of the most frequent and useful effects of this convergence of experiences is to enable the thinker to form a correct and rapid estimate of the means which are best adapted to the end which he has in view.

An able writer, in commenting upon Dr. Carpenter's interesting and, in many respects, admirable theory, accepts it with the needed amendment, that imagination as well as experience enters into the higher exercises of Common Sense; for with skill in using experience, there must be also "a touch of poetic insight, a talent for the use of undeveloped agencies, a gift for preferring an unexpected method to an expected, a great alacrity and courage for new lines of enterprise." In other words, originality, as well as the power of correctly applying experience, is involved in the exercises of Common Sense. The first Napoleon's system of tactics was not due exclusively to the instructions which he received in the school of Brienne, and which were founded on the military experience of the past, but to his own intuitive and original insight into those martial arrangements which would best subserve his gigantic purposes. The common sense which he so conspicuously displayed in all the complications of his affairs, was indeed always more or less marked by original genius. At a time, for instance, when nobility was universally understood to be an inherited and not a native grandeur, there was wonderful freshness and independence of view in his reply to the Italian flatterer who was endeavouring to prove to him his descent from the Dukes of Treviso. Ere the wily courtier had completed the false genealogy, Napoleon broke in with the curt declaration that his patent of nobility dated only from the battle of Montenotte—the first victory which he had gained over the Austrians in Italy.

The gift by which we are enabled to bring the results of experience, and the suggestions of intuition to rapid convergence upon a given question, is a distinct and natural power which may be transmitted by inheritance.

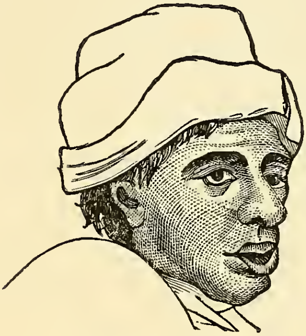
It sometimes happens that an individual displays more Common Sense in youth than in maturity. This phenomenon is owing to the fact that he finds it comparatively easy and rapid work to discriminate and apply the limited experiences of early life, but from want of mental grasp is confused by the accumulating and, to him, contradictory suggestions which are furnished by succeeding years. The fact that a long course of education sometimes impairs the practical capacity or Common Sense of the student, is also due to the bewildering effects of the accumulation of knowledge in excess of the power to digest and apply it.

Common Sense is the general characteristic which establishes the fact that a person is not a fool or a lunatic. Its facial markings are so decided that they can scarcely be mistaken even by the most careless observer. A fool is nearly always seen with vacant staring eyes and open mouth. It is thus that he is described by Dryden in the lines—

> "The fool of Nature with stupid eyes
> And gaping mouth that testified surprise."

Born without intelligence, or deprived of it by some unhappy accident, he will testify to the fact by the physiognomical disproportion of his features and the vacancy of his expression; for, as Sir Thomas Browne has it,—" In mystic characters we all bear in our features the motto of our souls." Lunatics are not so easily recognized as fools. They are often men who, previous to their derangement, were possessed of a high degree of mental development, but who have been thrown out of their intellectual balance by some ill-explained but abnormal condition of the nervous system. As this condition is usually the result of undue intellectual exertion, of keen emotions, or of long-continued anxieties, it has come to be a popular and not unreasonable idea that dullards never go mad, since their phlegmatic forms are incapable of the excitements in which madness originates.

Lunatics may be compared to a ship which has plenty of sail, but no ballast; or to a watch in movement without a balance-wheel. Their eyes, which have a peculiar glazedness, are sometimes fixed upon an object or upon vacancy with a ghastly stare, and sometimes wander from one point to another with a restless and hunted look, which it is very painful to witness. The expression of sadness which so often marks their faces is appalling rather than pathetic. It appears as if two synchronous trains of thought were constantly passing through their minds, and in the futile effort to harmonize them, they were burdened, confused, and even agonized. The unsteadiness which is noticeable in all their actions is but the external sign of their nervo-mental irregularities.



Foolish Sam.

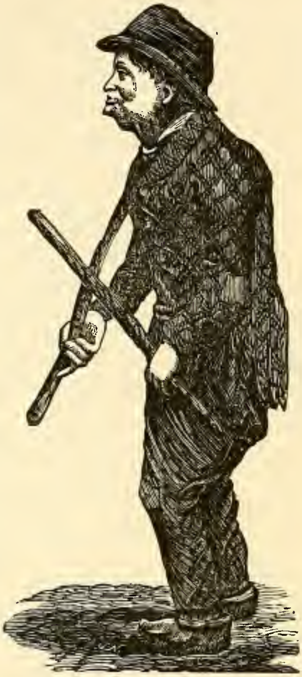
I append the cuts of a fool and a lunatic.

A person possessed of common sense never keeps his mouth open like a fool, or performs irregular and unreasonable actions like a madman. The degree in which he possesses this quality will depend upon the harmony of his whole being. It is a law of nature, that we cannot do outside of ourselves that which is not in accordance with our interior organization, and hence, as the act of judging is only a balancing of the various considerations which are connected with a given subject, such as value, weight, form, logical force, &c., the balancing power, or common sense is dependent upon a balanced condition of the system.

It is almost universally the case, that when the mind is exclusively directed to a particular department of knowledge or action, the special intellectual sense is developed at the expense of the common sense. James Brindley, the great engineer, a genius

> "Of mother wit, and wise without the schools,"

is a striking example of this truth. After having constructed the Bridgewater Canal, under difficulties which caused the *practical* men of the day to condemn the project as utterly chimerical, he is said to have been waited on by a committee of the House of Commons, who asked him for what object rivers were formed. The ardent engineer replied, with more enthusiasm than common sense,—"To feed navigable canals." Some of the most remarkable and useful men that the world has known have owed their success, not, as is usually the case, to the specialization, but to the universality of their powers. Such a man was Leibnitz, who was not only *primus inter primos* among mathematicians, but was also well-nigh equally distinguished as a metaphysician, naturalist, jurisconsult, theologian, and historian. Of this great man, Dugald Stewart unhesitatingly declared that literature and science had gained more by


Major, a lunatic, copied from the "Characters of Glasgow," published by John Tweed, 11 St. Enoch Square, Glasgow.

his universality than they could possibly have lost through the diffusion of his powers.

The lack of common sense which we so often observe in the pulpit is largely owing to the fact that the attention of preachers is so exclusively centred upon one class of ideas that they are blind to other considerations, which, to laymen, are the patent facts of human experience. In their violent attacks upon the sins of the Jews, and the vices of the Corinthians (while the sinners of their own congregations sit unreproved and uninstructed beneath them) they often remind me of the boy who stood throwing stones at a barn swallow that was building its nest beneath the eaves of a lofty edifice. When asked why he attempted to strike this far-off bird, while hundreds of the same species were standing near him, he replied, that if he could succeed in killing the one in the eaves, he would then feel sure that he could hit all the rest. The parsons, to whom I have referred, seem possessed of a similar idea which prompts them to the inspiring thought that if they can only make the dead Jews and Corinthians feel the point of their darts, they can afterwards impale every living sinner at their discretion.

THE THINKER.

There are few abstract things so generally recognized and admitted as the influence exercised on the Physiognomy by a protracted continuance in any particular calling or occupation. Even in occupations, the successful prosecution of which does not draw very largely upon the resources of the mind, we find the principle very appreciably at work; and few men endowed with any powers of observation, even although these powers may be developed only in a very rudimentary degree, can have failed to be struck with the approximate correctness which attends his speculations as to the probable calling of a chance acquaintance, even although he may have no other ground-work of hypothesis than the Physiognomy alone. Thus, on a Sunday or fête day, when, for the time being, the more material indications are obliterated in the metamorphoses effected by the powerful agencies of soap, hair-brushes, and broad-cloth, there is little difficulty in pointing out the vagrant, the artizan, the shopman, or the clerk; and when the facial index would seem to fail in its functions, because it is in impractical hands, an inquiry would almost invariably result in the elucidation of exceptional and explanatory circumstances, or in the discovery of an abnormal specimen of humanity. If this hold good in the lower strata of the social system, in which there is a less urgent demand for mental activity, we might be prepared to find the principle much more manifestly at work in those higher grades in which the intellectual predominates over the ordinary and the commonplace. And here, indeed, we do find this operation of nature leaving its handwriting on the visages of habitual thinkers with a pencil of no uncertain touch. As the process of serious reflection and mental analysis is carried on entirely within the inmost chambers of the organization, and as, for the time being, the visual organs are not required in their ordinary functional capacity, the eyes are either closed, or they are fixed on vacancy, utterly failing in discerning objects before them, which at other times would have aroused the most lively interest and curiosity. Habitual indulgence in reverie speedily fastens an indelible stamp upon the Physiognomy. The eyes, from habitually retreating backwards, to watch, as it were, the weighty operations going on in the laboratory of the organization, seem at last to take up their permanent abode there. Thus, the hollow sunken eye, which marks the visage of maturity and of age, invariably denotes long and continued struggling with mental problems. As in thinking, eagerness and impulse are the antipodes of mature deliberation and patient uncompromising investigation, so might we be prepared to find the marks which denote the votaries of the former to be the antipodes of the traces I have just been describing, and such is the fact. The unseen and hard-fought strife, with conclusions, which has its seat in the organization of the thinker, soon produces its handwriting on the outside, and the ploughshare of thought slowly but surely turns up the furrows across the brow and the face—furrows that can never afterwards be effaced. No great thinker ever had a smooth face. Not to men of deep reflection, but to children of tender years, and to children of older growth, belongs the smooth unwrinkled brow, which betokens the mind contented with its surroundings, and unspeculative as to the why and wherefore of the many mysteries which surround us from the cradle to the grave. In such men as Pope, Dryden, Cuvier, Leibnitz, Liebig, Morse, Robert Dale Owen, and a host of other glorious names of similar calibre, we have the deep and well-defined wrinkles of the indomitable and uncompromising thinker, who will accept nothing for granted, and will have none of halting conclusions or insecure and tottering premises. Here we have the attenuated features, the long deep furrows stretching across the forehead, and that drawing together of the occipito frontallis muscle which produces those wrinkles transversely to the muscle and forehead, the muscle running up and down over the forehead, and attaching or extending with its tendinous oponeurosis from the brow over the top of the head to the occipital bone. The shortening process thereby incurred, results in an elevation of the eyebrows and a consequent wrinkling of the skin of the forehead. But other causes contribute in forming the outward and visible marks of sustained thought and deliberation. By reason of the mental abstractions closing the secernent system, thereby cutting off and removing the supply of adipose or fat from the body, the cushioning behind the scalp is therefore diminished; the skin becomes localized into a smaller circle, and there lies more loosely and less closely packed, until eventually, folding up to accommodate itself to the narrowed space, the permanent wrinkles are formed for the uncomplex reason that there is more surface of skin than area of scalp. Nature is never at a loss in adapting herself to abnormal conditions and occasions. There is no greater self-deception than for a man to conclude that he has good grounds for claiming to be considered a thinker—that is, a thinker in the higher sense of which we are treating—simply because he is in the habit of dwelling listlessly on the incidents of past history—whether personal, national, or cosmopolitan. Fifty years of this kind of reflection would not of itself suffice to produce one solitary wrinkle; and a man fond of sitting on the rocks of the sea-shore and watching the ceaseless conflict of waves and rock-bound coast, would have fully as good a title to be regarded as a profound geologist, intimately acquainted with the structure and composition of the crust of the earth. Neither occupation demands any effort of the mind, and both are equally unproductive of solid results and of wrinkles. The *soi-disant* Socrates, and the suppositious sea-side dreamer, are merely participators in an amusement in which a child of tender years can equally as well engage, and in which all three have an equally small chance of fame and furrows.

Life sorrows and troubles of great magnitude are frequently found to induce the facial peculiarities of which we are treating in people who may not have been before suspected, and may indeed have been entirely innocent of anything even faintly approaching to deep and serious thought. And why? The importance of the crisis with which they are confronted is so immediate and so pressing, that it will not and cannot be dismissed from the presence of the mind, as more diminutive annoyances have hitherto been. They stand at bay, and the mental conflict begins and is carried on until some vista of fair weather is worked out in the organization, if that be possible; until, if no better may be, a state of calm and patient endurance is reached, or until broken, defeated, crushed in the unequal and unwonted strife, the mind sinks into the dull apathy of despair. But this enforced cudgelling of the brain leaves the same graven furrows and wrinkles which fall to the lot of the higher order of beings who are mental warriors from choice, form, and genius. No more telling instance of this can possibly be found than in the case of Abraham Lincoln. The stupendous and, for a time, well-nigh overwhelming difficulties which he had to encounter soon after assuming the Presidentship, had the effect, immediate and almost perceptible in its progress, of deepening the furrows upon his brow, of graving the wrinkles on his entire face, and inducing that expression of application and depth of thought by which he was distinguished. An ambrotype of Daniel Webster in his old age, which we have in our possession and which is copied for this book, shews indisputably that he was a Titan among mind workers. His face was then covered with wrinkles, and the attenuated visage and sunken eye tell a tale too unmistakably of consecutive years of mental analysis and abstract thinking, for a beholder to doubt for a moment that supreme Platonism and profound cogitation resided in the great man. The visual organs of children are prominent, because they are eager to gaze superficially and unthinkingly at any and every object which may arrest their fitful attention. They are delighted with frivolities calculated to enchain their facile powers of wonderment; but the owner of a thoughtful and contemplative mind can be discerned by his slow and measured step. Thoughtlessness and frivolity caper along with a mind equally unballasted and unchained; but the brisk, purposeful step which is direct, measured, orderly, and staid, stamps the abode of deep and weighty thought. To the latter the ordinary subjects of mere worldly concern are unheeded; and if a chance smile (he never laughs) is called up it is regarded as a lapse and a waste of time. The jocund laugh and merry jest are impossible with him; and he sighs in vain for power to engage in these despised pursuits, knowing full well that it is this unbending that would best refresh the weary mind and jaded body. Great thinkers carry their heads in a forward attitude; and the head thrown back—that infallible indication of a vacant mind—is a posture that will in them be looked for in vain. In the child we almost invariably find the eyes eagerly projected from their sockets; but with maturity come cares and anxiety, promoting serious reflection and gradually withdrawing the eyes into their coverts. Old age, with its habitual discretion and meditation, next supervenes, and then—how sunk the eye—how wrinkled the withered brow—how staid the walk—and how ever present are those indications which mark contemplation and anxious solicitude!

Dugald Stewart wrote of thinkers, that "there are very few original thinkers in the world, or ever have been; the greater part of those who are called philosophers have adopted the opinions of some who went before them." Cicero well understood how man was divine, as the following quotation from his writings will shew. "Whatever that be which thinks, which understands, which wills, which acts, it is something celestial and divine, and upon that account must necessarily be eternal." Byron well illustrated, in brief lines, that storms of thought were aroused by mortal anguish. . . . . "Now furrowed o'er with wrinkles, plough'd by moments, not by years and hours—all tortured into ages—hours which I outlive."

CURLY LINES;

OR, CURVILINEAR HUMAN FORMS.

THE world in which we live is ascertained to be nearly an exact globe or sphere; and all the organic matter found on its surface exhibits more or less roundness of form. Regular, well-marked angles belong to mineral crystallization; but every animal and vegetable has a curvilinear boundary in one or more directions. Very few even of the humbler plants have square stalks like the hemlock; almost every stem, from the tender grass to the gigantic forest-tree is cylindrical; and in the animal creation there are even fewer sharp points and angles than in the vegetable.

In the human subject, this curvilinear arrangement differs considerably in different individuals. The unpractised eye detects it most readily in the hair, which is easily seen to be either lank and straight, or inclined to curl. But whenever the hair is curly, the lines of the face will be found more curved than those of a straight-haired person. Only let the reader remember that in judging of portraits, and even living subjects, he may be deceived by artificial curls. Waviness or curliness in the hair is so undeniably becoming, that all British ladies before Victoria's time, and most gentlemen too, turned their hair with papers or irons; and many do it still. But where this is found naturally, we have a curly subject; and we are now to describe his general character, intellectual and moral.

First, be it observed that one cause of curliness in a child is great mental activity or strong physical excitement in the parents previous to the birth of their offspring; and this occurs more frequently in large towns than in rural districts. There may be parents possessed of great mental activity, living in the country; but the tendency of city life is to intensify all the attributes of human nature. When men and women crowd together in these dense masses, they are pressed downwards towards lower vice, or pushed up to higher virtue. Large cities are great magnets which draw thousands from the surrounding country and grind them to powder. Then the new forms that arise exhibit less angularity, and less straightness than those found in rural districts.

Curly hair is generally indicative of quick perception, keen temper, and a feeble sense of right and wrong. Curved lines in the face lead us to expect a loving nature, and a hopeful, sprightly temper. People thus formed are lively in all their emotions; you will generally find them good-natured; and though they may get mad about a trifle and abuse you, you will see them on the stool of repentance the next minute. On the contrary, the most definite people are those who are built on the straight principle. They are capable of high scientific attainments, whereas the round, curly men are generally gassy, seldom fond of hard study or close application; but clever at making a good show out of whatever knowledge they have acquired.

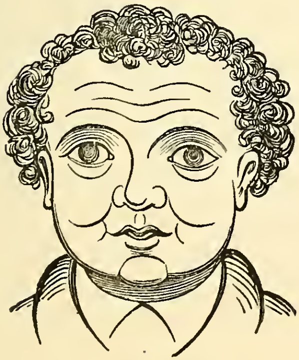
Among the lower animals we remark that dogs of the St. Bernard and Spaniel breeds have curly hair, and are remarkable for their active, hopeful, affectionate, and withal somewhat tricky dispositions. The little poodle may be seen fondly caressing its mistress; but if provoked, can be angry enough, and shew its resentment with considerable bodily activity. The curly-woolled sheep is similarly affectionate, sprightly, and passionate.

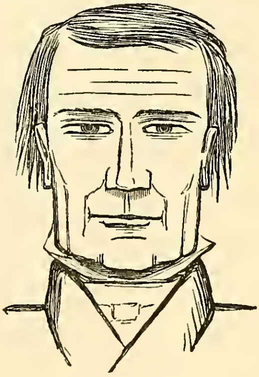
Then look at the curly-headed negro—the lowest type of humanity—full of childish glee, dancing, singing, and enjoying animal life; impulsive, and easily stimulated to work by sufficient compensation, but little capable of continued application to anything; and then how passionate and vengeful if not restrained by circumstances.

The lines of a sheep's face run in short curves, so do those of the spaniel, the same is observable in the negro; and a sameness of disposition in the particulars we have named is found to pervade them all.

It is worth remarking that as curly people have more of the animal nature and less of the higher intellectual, so children are rounder in form than full grown persons; and no one needs to be told that their animal propensities are vigorous, while the intellectual are little developed. So the negro race have physically much of the constitution which belongs to childhood, and no one could better describe their character than by calling them childish men.

All men possess the instincts of animal life in common with the brute creation, only in various degrees of strength, and more or less under the control of their higher powers. And a man having the curly attributes of the lower animal

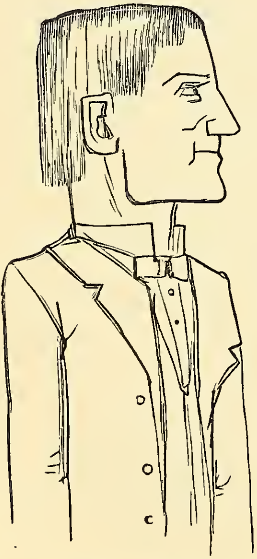

Curly Face.


Straight Face.

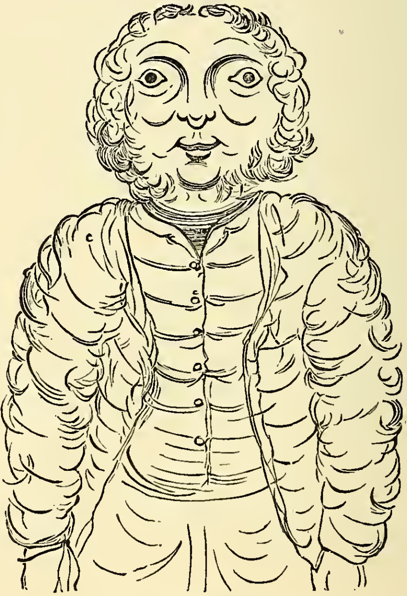
life, may yet raise himself to greatness by the diligent cultivation of his higher intellectual nature.

Here are two opposite characters represented by a straight face and a curly one. It would be a poor observer that could not perceive a difference of character under so striking a dissimilarity of form. One is naturally constituted to go straight, and the other more or less round about.

At college, the straight men are the hard students, the curly are the promoters of games and sports—what we call fast young men, who slip through their term of study and graduate with very superficial knowledge. They may excel in such light matters as music, poetry, painting, gymnastics, but seldom in mathematics, or other branches requiring severe thought. We rarely or never find these curly dogs obtaining a degree at West Point, for there is no partiality



Systematic, punctual, and straight-forward gentleman.



Surly, selfish, conceited, and deceptive scamp.

there, and students must be thoroughly informed before being permitted to graduate. Several of these curly fellows have, however, entered that school, but they have been obliged to leave after a short time, in consequence of some scheming, or bringing imperfect lessons.

The foregoing cuts may still further illustrate the contrasts we are describing.

The straight-faced and straight-haired men are orderly and punctual; they love good morals, and abhor vicious indulgences. On the other hand, that class of men who are most addicted to excesses, or what the world calls pleasure, are most commonly of the curly structure.

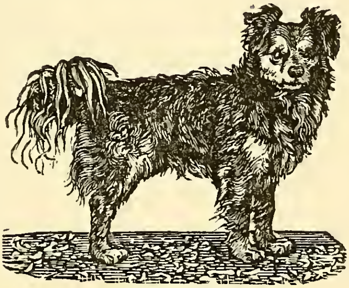
The straight men make the best mechanics; because, being exact and honest in themselves, they more naturally turn out solid and stable work; for the product of the artificer's labour is only character and disposition wrought out upon tangible objects, which, therefore, become registered evidence of that character. As stable men do firm and stable work, so fanciful artizans make light and showy articles. An honest workman performs a good job, but a dishonest scamp accomplishes a mean sham. Straight men tell the truth and are transparent as glass; you know their intentions, and can discern that all they do is at least intended for good. But round-about men often disappoint you. They are more attractive at first sight, more plausible, more winning in their ways, but they do not wear so well; do not bear knowing so thoroughly. If they do not deliberately and intentionally deceive you to accomplish a selfish end, they may prove untruthful through mere thoughtlessness and carelessness about strict integrity; and this to a degree that may deeply wound and grieve you. Do not mistrust and avoid every curly-headed man as if he were necessarily a rogue, but for an enduring steady friend, cultivate the acquaintance of the straight man; less fascinating, less get-atable at first, it is worth your while to persevere in winning his esteem, and gaining his affection.

The ancient Greeks judged intellectual character much from bodily forms, yet they regarded honesty more highly than rounded beauty. Socrates was angular of form, yet profoundly intelligent and philosophic. So we shall often find the disinterestedness, the integrity, and the ability of a Socrates in connection with those straight lines and sharp angles which militate against our ideas of what is handsome and attractive in the human form. William Pitt, who wielded the energies of the British Empire through the most awful period of her history, was a man of straight physique, as a glance at any good portrait of him will shew. His great rival, Charles James Fox, was just as strikingly round and curly. We are told that he (Fox) was distinguished at school for quickness of parts, warmth of affection, and occasionally earnest, but irregular application to study. Also that in his early manhood he was ardent and thoughtless in the pursuit of pleasure.

The Earl of Bute, another statesman of George III.'s reign, was a handsome round-faced, curly subject. He had no great talent, but obtained his place and power by the personal influence which he early gained over the monarch. The British nation believed that America was lost to her through his counsels; and there is little doubt that that loss mainly contributed to overthrow the intellect of the king, who had yielded himself to be guided by this handsome, plausible, ambitious, weak-minded fellow, rather than by the talented, far-seeing Pitt.

Wellington was one of the straight-lined; and he was distinguished in the Cabinet for a purity of motive and conduct rare among statesmen, no less than he had formerly been for bravery and military skill.

Nelson was physically such another, and was remarkable for integrity of purpose, with disdain of everything selfish and sordid. Perseverence was a striking feature in his character; and we are told that "he always went straight to his object, and so escaped all those difficulties incident to doubt, finesse, or timidity, which embarrass the proceedings of vacillating and crafty minds." Among American notables, we cannot forbear to allude to Martin Van Buren, as a curly formed man in an extreme degree, and a more deceptive and wily turncoat than he never lived. Lincoln may be named as a good example of the straight-lined type, likewise Grant and Sherman.



A curly, ambitious, and jealous Dog.

THE WALK AS INDICATIVE OF CHARACTER.

GENERAL INTRODUCTORY REMARKS.

THERE is a principle in nature that every motion accords with the life-principle of the animate being producing that motion. For instance, the turtle waddles slowly along, and thus shews that its mind has little energy, and its range of thought is limited. The deer, on the contrary, bounds over the hills and mountains, and spins away before the pursuing hounds, in perfect accordance with his active nature. Having a quick, instinctive perception of danger, on the slightest suspicion of it he darts away with the rapidity of the wind, displaying, at every bound, how beautifully his limbs express the eager rapidity of his mind. He delights to range over the lofty mountain-tops, and scale the precipitous cliffs. It would be derogatory to his character to suppose he left his mind behind, or that it had less range or scope than his body.

Men who are great travellers have more intelligence and mental range than those who remain at the old homestead. Compare such men as Columbus, Vespucci, Cabot, Cook, Humboldt, Irving, Agassiz, Livingstone, Darwin, and hundreds of others, who have visited all parts of the world, with men who have staid at home and kept their minds within a narrow range of thought. Whatever applies in one department of animal life, as a general principle, applies equally to all portions of animality. We find the dog ranging over mountains and valleys in rapid succession; consider how favourably he compares, in the excellence of his mental capacity, with the sloth, whose range of activity includes only a few yards *per diem.*

The fundamental principle, in judging of the human walk, is, that it is simply the result of character—the mind is the motive power, and the walk is the result. Let it be admitted as a principle, that whatever is produced bears the indelible stamp of the producer; and then we can easily account for the fact that every likeness painted by a German artist from imagination resembles the German face and character. So also is this the case with the Italian, the Frenchman, and the Englishman; each gives his work of imagination the national likeness peculiar to his own country.

Philosophically, the legs may be considered as animal imitators of the mind of their master. And as we conclude that every freeman is, or ought to be, master of his own legs, then we can easily see how they, in their motions, bespeak the character of the individual to whom they belong, provided they are in a normal condition. Hence, we see the quick step produced by the active mind; the slow, dragging step by the stupid and inactive mind; and the bounding, springing step by the sprightly elastic mind.

Another principle in nature is, that no one can produce naturally that for which he has not an organization. We fail to judge accurately of a faculty or quality in which we are ourselves deficient. Thus, the natural walk must be in accordance with the organic structure. Hence, men who are tall, generally take long slow steps, and have slow, far-ranging minds. As examples of this, we may mention Washington, Lafayette, Lincoln, in America; Walpole, Newcastle, and Castlereagh, of England; Havelock and Lord Sligo of India, &c., who were all tall, dignified forms, and were remarkable for their slow, measured, and dignified walk. Short men, true to the principle, have a short step, and generally employ their minds on small insignificant matters. From this rule should be excepted men with long bodies and short legs. Professor Morse, the inventor of the electric telegraph, was a very tall, dignified man, with a deliberate, long step, slow and dignified, which shadowed forth the result of his far-reaching, inventive mind. He launched into seas of undiscovered knowledge, and fields of more than golden value were discovered by him.

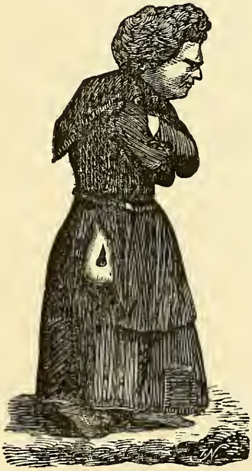
In the common acceptation of the term, a short person cannot be dignified; for dignity includes stateliness of manner in connection with height. Nothing that is short, dumpy, or stunted can be looked upon as dignified. The short step and mincing walk bespeak the small mind, as a general rule. The energetic step bespeaks energy of character. The man who is not formed on the mechanical plan has no skill in judging of mechanism. He who has no colour in his eye, skin, &c., will generally be found to be an inferior judge of colour. Hence, the universal law of nature, that like appreciates and best judges like, applies equally to all traits of human character. One in whom centres many colours, having bright blue or brown eyes and rosy cheeks, will judge of colours better than one in whom no distinct tints or varied hues appear. This law explains the reason why men confined in dark cells for a succession of years cannot discern and judge of colour. Any plant germinating in the dark is colourless, because it has been shut out from the sun-light. It is well known that the finest art colorists lived and studied in a climate refulgent with sunlight and colour, such as Italy and Spain; while in Scotland, England, and Ireland, where fogs and murky atmosphere prevail more than half the year, obscuring the sun's direct rays, we find more pseudopts than in any other well-tested civilized country.

The law of nature is, that we can always judge best of any faculty of which we possess most. The man who takes the longest step has generally the most comprehensive mental range. The plain, easy walk is indicative of an unassuming mind; the plunging or stamping step, an unvarnished mentality. The unsteady gait results from unreliability of character; while the light, tripping step bespeaks a playful and hopeful disposition. The mechanic's tread is measured and regular; the speculator's walk is irregular, because he is organized to do things out of the regular routine, and, by fits and starts, seizes the opportunity to make a speculation whenever the chance occurs.

As an interesting instance of indications of the true character in the walk, all of which are palpably apparent to the scientific Physiognomist, it may be stated here, merely as a fact, that when the author was some years since delivering a course of lectures at Clinton (Iowa), a young man, walking across the lecture-room to test the lecturer's powers to judge, and the science of Physiognomy to point out his character and capacity, elicited from the author the decided opinion, that " he might become successful in literary pursuits." The gentleman's name is Mr. Bernard Wayde, who adopted the directing opinion of the lecturer, by commencing, within a few weeks after, to write for the press. So successful has Mr. Wayde been as a literary man, that he is now (1872), residing in Edinburgh as correspondent and novel-writer for some of the most influential journals of New York and other American cities, after having edited four papers, as well as written numerous plays and novels; several of his plays having been dramatized with remarkable success. Thus does the walk unerringly indicate character.

WALK OR GAIT.

INDICATIONS OF CHARACTER AS MANIFESTED BY THE PEDESTRIAN, AMBULATORY, AND PERIPATETIC MOVEMENTS AND ATTITUDES OF THE HUMAN BODY IN THE STATE OF LOCOMOTION.



A Toddler—Foolish Mary.*

To the most casual observer it must have occurred that there are perhaps no two human beings that walk in precisely the same manner; the gait of every one is as peculiarly his own as his handwriting. Though there are many who have something similar in their movements and attitudes during locomotion, and appear to the cursory observer to walk alike; yet to the practised eye there are essential points of difference in their peripatetic characteristics. Education and training, assisted by the mimic inclination of our nature, do much to produce *styles* of walking; but the close observer can detect at a glance each person's idiosyncrasy, and thus can tell, almost certainly, the physical, mental, and moral qualities and tendencies of the individual.

In this article, we intend to classify all varieties of human pedestrian, ambulatory, and peripatetic locomotion under the two general heads of Natural and Artificial Peripatetic Manifestations of Character

---

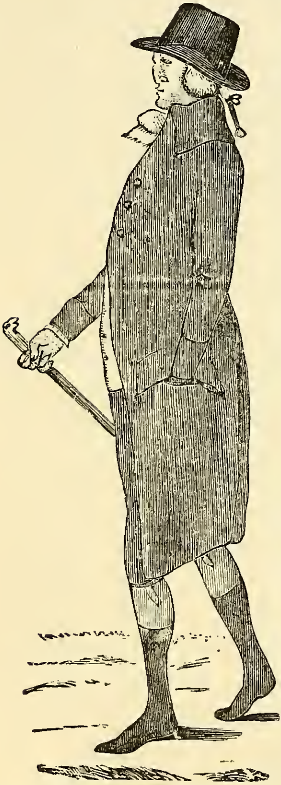
* This cut, and the others illustrating this chapter, were copied by permission from "The Characters of Glasgow," a valuable octavo volume published by Mr. John Tweed, 11 St. Enoch Square, Glasgow.

I.—NATURAL GAIT.

By the natural gait, we mean that mode of walking peculiar to each individual. Let us enumerate a few of the most usual and well-marked salient characteristics of these, while we specify them under epithets sufficiently expressive of the pedestrian idiosyncrasy.

1. *The Toddling Gait.*—This manner of locomotion is essentially childish, and unmistakably tells you that every attribute of a petty, trifling, finikin character may fairly and unhesitatingly be predicated of the human form that toddles. If an acquanitance meets it, every expression of childish pleasure is manifested by the toddler. It cannot rest or stand at ease for a moment, but keeps moving up and down, round and round, and gets so excited that it stops short in the middle of a sentence and toddles off abruptly. Then, when you have smiled the natural beneficent and compassionate smile of half-pity, half-contempt, and total forgiveness, while turning away, in a moment you hear pitty-patty, toddle, toddle, up behind you, calling out that it had just forgot to mention that its dear Persian tabby had that morning had three beauties of kittens; but, poor little darlings, they were not yet able to frisk so jolly as their mother, the beauty, did when it first received her from Lady Mary Frisk. The features almost invariably developed in the toddler are of the small, chubby, childish mould, round, soft, and cheerful; and it may be remarked that, in its right-hand pocket, there is generally a store of comfits or small sweets, one of which is popped into its mouth by way of self-gratulation or reward after encountering and so delightfully enchanting an acquaintance, as it

did on the occasion just mentioned. When toddler is of the masculine gender, it may be remarked that the toes of his shoes are much further out of repair than the heels; that there are seldom all the buttons on the garments, and that, both a glove and an umbrella have just been lost, occasioning the necessity for trying to recollect every place Mr. Toddler has been, and thereupon revisiting it. This generally terminates its day, but without ever recovering the lost articles. In childish grief, and from sheer exhaustion, toddler, with a vexed heart retires to rest, but rises the next morning to go through a similar fruitless round of duty. Mrs. or Miss Toddler acts in a similar manner, but always displaying in her routine of duty all the coquettish, little, childish graces that so admirably become her sex. It would be cruel to expose or ridicule this darling, charming, natural, little creature. We have all seen her and many of her kindred often enough to be sufficiently well acquainted with her gyrations and winning ways.



The Striding Gait—
Bob Dreghorn.

2. *The Striding Gait.*—Who has not seen the man with the long striding pace? Always in earnest pursuit of some definite object or project, he strides along with purpose-like tread until he obtains it, or definitely ascertains the reason for disappointment. Every feature of his face bespeaks its earnest sympathy with his progressive measured gait. Though this style of pedestrian locomotion

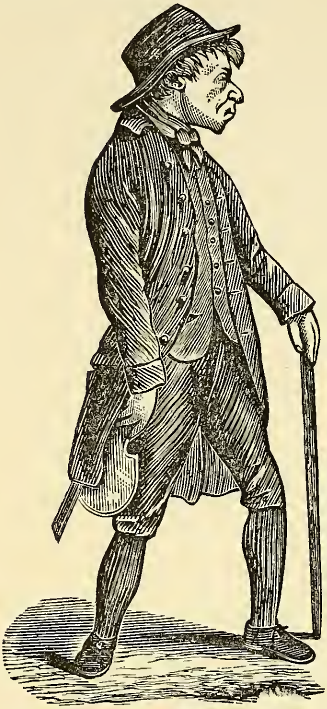
is generally seen in persons above the middle height, yet it is frequently met with in those of diminutive stature. There is, however, mostly this difference: the long-paced, tall individual carries the trunk of the body much more erect than the undersized person, and pendulates the arms more freely and better in keeping with the whole figure; while the diminutive strider generally manifests uneasiness and difficulty in managing the arms; sometimes they are controlled by hooking the thumbs in the vest pockets or cleeking them in the arm-holes; but no matter how they are carried, they seem to be either in the way, or hard to manage. It somtimes happens, however, that the undersized strider has abnormally short arms, and then they appear like the short wings of the auk, or the forelegs of the kangaroo, and serve the purpose well in being used as strong levers in raising the body in gymnastic exercises, ascending the shrouds on board ships, or in burglaries. It is well-known that this is the prevailing feature in the notorious burglars of large cities. But, in the other features of the persons peculiar for the striding gait, we may remark that there is the long, slow, measured, quiet pace in some, while others have a quick, impetuous movement, displaying that push and determination of character that does or is prepared to bear down all opposition to any project that has been undertaken. It may be remarked that an accompanying *cephalic* feature in this character is a broad massive head, thick, square nose, wide nostrils, and square, massive, prominent chin, compressed medium lips, and eyes either prominent and severe, or sunken with a falcon expression. The late Dr. Chalmers was of the full-eyed, strong-featured type; and of the latter, was the famous Dr. Henry Cooke, the champion of trinitarianism in Ulster. But the reformer, John Knox, of Scotland, was perhaps the best example of this character. Then we must remark that the striding, slow, deliberate pace is accompanied by round, soft facial features, rather loose and flabby, the underlip generally keeping time with the step, as it is seen to hang loose, the mouth being almost always slightly open. Though this character is generally successful in the course of a long steady career in one line of life, yet it is seldom found that any mighty effort is attempted. The impetuous striders are too ready as well as eagerly willing to surpass what they call the slow, jogging stagers. The impetuous rapid strider has his purpose and goes right ahead to accomplish it, bearing down all obstacles; while the quiet, slow, cautious strider has also his object before him, but patiently foresees the difficulties, and determines to watch and stride cautiously and zig-zag to the end, no matter what discouragement may be thrown across his path. The rapid strider leaps over or kicks minor hindrances out of his course; the slow strider steps over them quietly, and leaves them there for the next comer. Daniel Webster belonged to the class of the strong and gigantic intellects, and his gait gave token of the great mind within his vigorous form.

3. *The Lurching Gait.*—Sometimes this manner of walking is denominated rolling. It is seen to perfection in people who are half-seas over, just before the real staggering attempt at progressive motion is commenced. In persons of sober habits, however, the rolling and lurching gait is characteristic of innate overweening conceit, if displayed in an impetuous character; while it betokens diffidence and awkwardness in a timid, retiring individual. The *rapid roller* is marked by strength of purpose and self-reliance, and becomes dictatorial and overbearing among his associates; as a commercial traveller he is almost always successful, and no matter how often foiled in his efforts, he returns to the charge, and mostly succeeds in carrying his point. Tall, heavy rollers often become bullies, and are found as patrons of the ring, the race-course, and the

gambling hell. They are always ready with the word of defiance, the fist, the shillelah, the revolver, the bowie-knife, or the stilletto, according to the nation to which they belong. Look the rolling and lurching bully in the face, and you catch his wicked defiant look or stare; see his squat snout, compressed, puckered lips, broad underface, square, broad chin, bull-neck, and short, broad hands, which he never extends open with the palm upward. When he stands, he naturally poises himself in an attitude of defiance, with his feet well apart, but not awkwardly, as much as to say, "I'm ready, come on." This type of character is commonest in the midland counties and borderland of England and Scotland, the counties of Mayo, Galway, and Tipperary, in Ireland, and the Kaffirs of Africa. The Normans and Norsemen were the most distinguished for this phase of character during the middle ages. But let us look for a moment at the timid lurching character. He is slow in his movements, and the uncertain straight-toed alternate motion of his feet, with a half-kneeling expression of his legs, while he sways timidly from side to side, like a ship with rigging too heavy and without ballast. His look is generally shy, his eye having a distrustful, half-averted expression. This character is so seldom good for anything but the lowest drudgery, he is mostly found among the basest and most degraded in the back slums of large towns and cities, through which he may be often met prowling about, intent upon some favourite vicious gratification, or nefarious project.

4. *The Sweeping or Mowing Gait.*—This well-marked and pronounced mode of peripatetic progression is much more easily observed in women than in men. This simply arises from the flowing nature of the female costume, which receives the vibratory motion from the body, and gives marked and palpable indication of it in its sweeping pendulation in a room or on the street. But

it is nevertheless equally observable in the opposite sex when watched carefully. In the male animal, the right-to-left and left-to-right sweep at every step, is almost always in conjunction with a peculiar wriggle perpendicular of the whole body from head to foot. The effect of this double vibration and contortion of the whole body instantly impresses the observer with the true cause of the outward manifestations—an intense self-conceit and overweening persuasion of superior knowledge and ability. The immense variety of countenance accompanying this corporeal expression of character would occupy too much space in describing; but the most prominent visual peculiarities may be stated, as a narrow head, low forehead, eyes in close proximity, irregular nose tending to a thin upper half, long upper lip, pouting mouth, curling lip, and flabby cheeks, conveying, on the whole, an utter want of sympathy, which is generally well borne out by the almost invariable sausage fingers of the hand that never gives a kindly grasp. Morally, this character is a hypocrite, and generally may be found among those accused of false pretences. This gait radically indicates vacillation, untrustworthiness.


The Sweeping gait. Blind Alick.

5. *The Firm Gait.*—This is found only in strong characters, whether physical, moral, or religious. It at once

indicates strength, and bespeaks the confidence, dread, or veneration of the beholder, in accordance with the accompanying characteristics of the countenance. The whole structure of the person whose walk is firm, manifests compactness, solidity, and stability. He is staunch in every sense, and in all his intercourse there is a reliable and unshaken steadiness and resolute constancy upon which the sheerest stranger seems to place implicit reliance. Then, the strong, firm tread and gait of one who inspires dread is associated with a stern countenance, lack of sympathy with others, and devotion to self-indulgence. This character may be easily known by his sturdy tread, often light, but as certain as a bull's-eye shot; his low forehead, snub-nose, hanging jaws, pig's throat, broad chest, well-developed lumbar regions, full, beautifully-proportioned lower limbs, and well-arched foot, which all bespeak the character to awe the timid beholder. This is the physical, without either moral or spiritual restraint. Now, look at the historical examples of this. The most remarkable, well-authenticated instance we have in ancient times, is that of Agamemnon, "king of men," "whose tread was firm, but like music; whose heart was stern as Charon, the ferryman of Hades, and whose word was law to all the besiegers of Troy." In recent modern times, we shall only mention the Emperor Napoleon the Great, whose step and build are so well-known that they require only to be mentioned to recall their peculiar characteristics. His whole frame was so firm and well knit together, that it moved in perfect harmony; but the secrecy and feline trait of his nature so much affected all his movements, that his step was as sure and silent as the tiger's, and hence his spring and onset was as sudden and terrible. He is the best example of human physical firmness of gait, bespeaking stern firmness of command. All his features and build indicate these qualities in a pre-eminent degree. Below the middle height, but massive in all parts of his body, he shewed strength at all points. His head was large, broad, and square; the deep, vertical furrows in the forehead, between the brows, indicating intense concentration; the deep eyes, aquiline nose, compressed lips, and prominent chin, all, in harmony with the other firm features of the frame, manifested in an extraordinary degree the pre-eminently stern, inexorably firm character. These two great generals, with whom we might include Wellington, the conqueror of the latter, are sufficiently well-marked and amply authenticated characters to fix the truth of our observations on mere physical firmness. As examples of moral and religious firmness, we mention only a few remarkable names whose gait and concomitant features have been so well authenticated, that their names will recall their distinctive characteristics, especially if assisted by good likenesses or statues. Julius Cæsar, Brutus, Gregory VII. (Pope), Luther, Knox (of Scotland), Elizabeth of England, and Cecil her Minister, the present Emperor of Germany and his Minister, Prince Bismarck; all these went steadily and directly to the point.

6. *The Shuffling and Shambling Gait.*—This mode of peripatetic locomotion is indicative of everything that is degraded, low, and vile in character, as well as imperfect and infirm in physical conformation. To some it is natural from birth, as the offspring of those whose physical defects and infirmities are perpetuated in their persons. Watch the shuffler physical, as he trawls his broad, flat, nether extremities along the street or floor. Every movement is a slovenly effort to progress; but the trail in the mud, or dust, or sand, shews the slovenly snail-like attempt at progress. All his habits, dress, and features are in keeping with these attempts at pedestrianism. His habits are slovenly universally; hair untrimmed and unkempt; face smeared, and eyes bleared and blinking; all his garments from the throat downward bespattered with the particles

of whatever he has attempted to put into his mouth for months past, perhaps, or sprinkled with snuff or tobacconized saliva. Then look at the shoes or foot-coffins in which his flat substitutes for feet are rolling and lurching about. They are off at one side, ripped in the soles, full of side chinks, and ever ready to admit the slush of the street to cool the neglected bunions that sorely torment the toes, though the pain, however acute, scarcely ever rouses the forlorn shuffler to attempt a cure, no matter how simple. Then glance for a moment at the cut of the outer garments. The coat is always too wide, too long, and has the cuffs nearly to the tips of the filthy fingers, which have perhaps never made the acquaintance of a glove. The vest wants a button or two, and is seldom with the proper button in the opposite hole. Now look at the trousers or pantaloons, always at least two inches too long, and ever moist about the ankles, thus beautifully in harmony and keeping with the shoes. Is it now necessary to pollute our eyes by looking into the facial points that so logically accompany all these? Yes, look but for a moment and mark the striking consistency. The brows are elevated and unthoughtful, the eyes bleared and sleepy, the cheeks puffed with gross fat, the nose misshapen and moist, the lips without expression, and mostly as far apart as may be without effort. The expression of the whole is disgusting in the extreme, and bespeaks no more in the uneducated than the first remove from the brute. But it must not be forgotten that there are shufflers who have much cunning, and often manage to amass wealth. One of these died, not long since, in London, leaving £4,000,000 to his heirs, after cunningly shuffling and cheating for sixty years.

7. *The Parallelopedic or Intoed Gait.*—This characteristic of pedal progression almost invariably indicates closeness and meanness as well as penurious stinginess of character.

It is often accompanied with a lurching, hobbling, painful carriage of the body, indicative of being ill at ease, with a pinched, miserable expression of countenance. It also indicates stealthiness and low cunning. The feline species of every kind put down the foot in this manner; but the Indians of North America not only walk with the feet parallel, but put down the one foot straight before the other, in line; and they are notorious for their cunning and treachery in every sense. The features that mostly accompany this gait are sharp and unattractive. In all dealings or transactions with those whose locomotive pedestrian habit is intoed, every one should be warily on his guard. It was observed that when two solicitors, equally deformed in this manner, happened to be engaged on opposite sides in a chancery suit in London, the game of finesse was so well kept up by the raising of new points, of nice difficulties, that the estate, though large, was completely exhausted before the suit was half completed.

8. *Splay-footed Gait.*—Though this is a completely or diametrically opposite abnormity to No. 7. yet it indicates many similar traits of character. This mostly arises from the fact that *intoed* deformity generally originates in the legs being caliper-shaped, while the splay-footed is caused by the knees being too affectionate towards each other. Still there are several traits of character peculiar to the latter gait. In the splay-footed, it is almost universally found that the character of the shambling shuffler prevails, with an ill-disguised dash of the feline cunning. Indeed, most of the characteristics of the knock-kneed and splay-footed may be found in the description once given of four such characters, who resided in Dublin, by a waggish friend of theirs, that "they were sagacious, silly fools." Anomalous characters.

9. *The Plunging Gait.*—This is not an infrequent mode of progressing. The distinctive feature of the plunger is

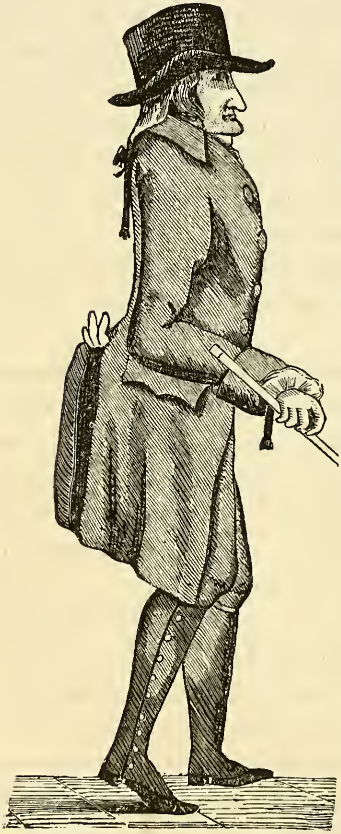
a looseness of the knee-joint, which gives the walk the appearance of a succession of curtsies, but with the painful appearance of being at every step almost precipitated on the head. The form of those so affected is quite in accordance with the up and down or undulatory appearance of the walk. Alternately you will find them in high spirits, full of hope and jubilant; again in deep depression, soon to rise into the opposite extreme. Hence the life of the plunger is one of fear and dread, hope and joy. His countenance most truthfully indicates this. Amid deep lines of sorrow and foreboding, may easily be perceived the laughing wrinkles round the eyes, and the traces of the cheerful smile that often plays around the mouth, and sets the chin so cheerily in harmony with the mobile lips. Almost in every instance the plunger will be found possessed of warm affection, but subject to deep depression on any want of affectionate reciprocation of the loving emotions.

10. *The Fatuous Gait.*—This kind of walk is so apparent to the most careless observer that it only requires to be pointed out or mentioned to be recognized and understood. The gait of the imbecile may be observed in any large community, from the partially weak-minded to the drivelling idiot. In proportion to the stage of weakness of intellect, the walk is unsteady and paralyzed, until it becomes as nearly as possible like the balancing gait of a drunkard, but retaining impetuosity of motion.

Minor varieties of natural peripatetic locomotion might be easily enumerated, but enough has been said to stimulate the intelligent observer to analyze the peculiar pedestrian characteristics of almost any human biped that may cross his path, or strut before him.

II.—Artificial Gait.

By artificial gait we mean that mode of walking incidental to every profession, trade, or calling, as well as that taught by posture and calisthenic masters and mistresses, as preparations for the drawing and ball-room. As the artificial walk, saunter, and strut are so varied, and, in almost every instance, acquired with the intention of concealing the natural mode of pedestrian locomotion, we shall not attempt more here than the pointing out of a few of the more prominent artificial styles of walking. Take, then, the professional styles first.



The Military Gait.—Captain Paton, of Glasgow.

1. *The Military Gait.*—On close observation, one may, without much difficulty, perceive that, from the field-marshal in every rank of the army, down to the raw recruit, there is a style peculiar to each. The best mode of getting an accurate idea of the difference between a recruit and a trained veteran is to watch the drill, or the march past, on a review day. Then mark in the one the irregular dubious step, while in the other, every man seems to be so completely trained

that he simply might be looked upon as a nicely-adjusted part of a very smoothly working machine. This perfect drill and training gets at length so much into the nature, that the old soldier, when walking alone, steps with as much precision and accuracy, as he would on the parade-ground or on the march. Habit has become so thoroughly a second nature that, except from the scarcely now natural features, and the forms and powers, one could scarcely tell the real character. Next, we have in the sergeant, sergeant-major, lieutenant, captain, adjutant, major, and so on, still rising in rank, the indubitable characteristics of office naturally stamped upon the man by the exigencies of his office. But, in all, the military strut and tread betrays the soldier and the rank. To the officers, both subordinate and general, the same remarks apply, but these have their peculiar and distinctive airs and struts of importance, until we come up to the colonel, the general, the marshal, and the commander-in-chief. To see these higher ranks to perfection, they must be observed in the promenade and the ball-room. The general rule to observe, in judging of them here, is that the more strutting, and lofty-looking, and supercilious bearing they manifest among civilians, the less noble and elevated is their character in all the nobler attributes of mankind.

2. *The Clerical Gait.*—This style (or want of style) is so varied by denominationality and conventionality that we must merely point out the leading characteristics of a few of the principal churches as manifested in the gait of the clergy. The English established churchman, of every grade, carries himself with a degree of importance and superiority on all occasions of intercourse with the clergy of other denominations. In general he may be at once known by his attire, and the self-important air and tone of dictation he assumes, though we must do him the

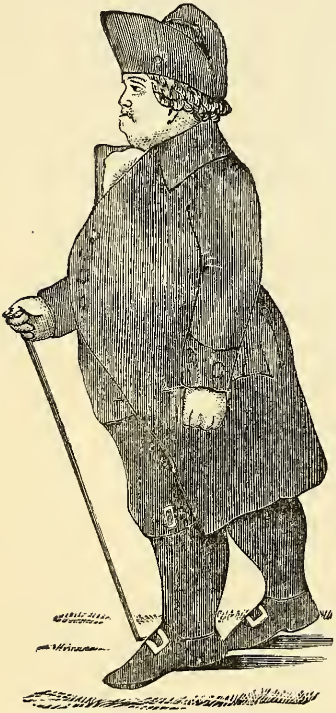
justice to say that, in sleek, soft, bland insinuation, and sanctimoniousness he is far surpassed by many of the clergy of the dissenting denominations. In their disguises at the theatres, racecourses, and fox-hunts, is the best time to observe their peculiar attitudes and gait. The lower limbs are generally, in comparison, weak; and in walking, run parallel from the knees to the heels, keeping the feet almost parallel. This habit is contracted in the constant genuflections necessarily gone through in the reading of the church service, and during the visiting of the sick, in their probationary curacies. Also, it should be noted that, from habit, when they wax earnest in conversation they involuntarily use their pulpit attitudes, and at the end of an animated sentence, settle their gown and imaginary bands, clasping their hands in the attitude of prayer. The Scotch churchman is equally important, in his own way, as the English; but his modes of worship give him a much more free and easy manner, though he wishes it to be known and felt that he is a superior being, ever since the hands of the presbytery were put upon his head. In his gait he slightly resembles the Episcopalian, but the legs and knees are not so nearly in the supplicatory attitude. This arises from the fact that the Scot is in the habit of standing and praying extempore. Among dissenters, we may take under the same head the Methodist and the Baptist preacher. These are so much alike in gait that it takes a keen eye and much experience to discriminate the one from the other. They both have the sleek, solicitous, bland how-is-your-soul and where-is-your-money look. Still there is in the Methodist parson rather more of an independent look and manner. The Roman Catholic may be known, all the world over, as soon as he walks and pendulates his arms, especially if he has been much on duty. The expression of the genuflecting nether limbs, and the wave of the hand in the gesture of consecrating the elements, are never got rid of by the Roman ecclesiastic.

3. *The Legal Gait.*—Like the clerical, this is so much dependent upon the branch of the legal profession to which the individual belongs, that we must confine ourselves to the general characteristics of the walk. The face and attitudes of the hands far more plainly indicate the professional physiognomical traits than the walk. In every branch of the profession, however, the sly, cautious, stealthy, hesitating, parallel-footed gait prevails, and need never be mistaken after a few careful observations. In all countries the man of law who has devoted his life to it, has these distinctive traits.

4. *The Medical Gait.*—The medical man, who has been some time in practice, becomes cautious and quiet in his movements, so that he seems almost always to feel as if he were entering the sick room, where silence and reticence are necessary for the safety of his patient. Hence he learns to tread lightly, and contracts the habit of putting down his feet nearly parallel and stealthily like a cat. Almost invariably when he stands his feet are almost close together and parallel, his head slightly bent forward, and his hands in his pockets. When suddenly roused he invariably pulls out his watch. This is sheer habit.

5. *The Mechanical Gait.*—Almost every mechanical occupation impresses its character upon the operative. The sawyer, smith, cobbler, and all those employed in mechanical operations of a regular, measured, motive nature, will walk with a steady, measured step, and pendulate their arms in the same manner; so impressed has his nature become with the regularity of the mechanical motion with which he has been associated. This character is generally able to rise at any hour he wishes, so accurate has he become in time, which is only another name for

motion. Ask him the hour, and at any time he will answer you at once, and seldom make a mistake of more than five or ten minutes. The famous self-made engineer, George Stephenson, of Killingworth, was always so sure of the time that he would boldly assert that such and such a clock or watch was wrong when it differed from him. And not infrequently was he put to the test by his fellow-workmen. In after life, when he became a great engineer and very prosperous, he was asked by a brother workman, who had also risen in life, why he wore a gold watch, and he replied, I'm regulating it. Tailors are easily known by their gait. The knee, in their case, becomes braced from their peculiar manner of sitting, and the bent form of the leg from the knee to the ankle gives, with the fixity or stiffness of the knee, a short, light, out-toe step, so characteristic that it can never be mistaken. Should any doubt on this point arise, the fact will at once be settled by looking at the hands. Every finger has taken its set expression from the peculiarity of the manner in which it is constantly used. The left hand should also be observed, as its expression is quite different from that of the right, especially in the lower, or nail joint of the thumb, which is bent in the manner it is accustomed to hold the seam while the right hand stitches. It is



The Mechanical Gait—David Dale, a good man.

needless to pursue this further than to direct attention to the expression given to the under lip by the pulling down of part of it by the thread, while the tailor bites the end with his teeth. Equally easy is the selecting of the cobbler from the crowd. Observe his mode of working. His knees close together, with feet slightly apart, and resting on the inner side—his head habitually bent downwards—his arms muscular and well-developed—the thumb of the right hand in the act of holding the awl and piercing, so different from the left, which has acquired the habit of keeping the thumb closely applied to the forefinger in the act of inserting and extracting the bristle at the extremity of the "end." But we have double confirmation of these mechanical habits, if we are allowed to witness both the tailor and the cobbler in animated conversation. The tailor performs all his gesticulation with the right arm, and that in a most characteristic manner, by drawing out that limb at the end of an impassioned sentence, just as he would give a long sharp pull to his newly threaded needle when he has forgot to put a knot on his new thread. But this is not all: the left hand is all the while performing its peculiar function, by damping its forefinger on the tongue and under lip, and quietly rolling an imaginary thread between the thumb and finger. In the case of the cobbler, both arms come into play in a state of animated speaking; but watch well the peroration period, and then you see the gesture in perfection, when the hands are stretched out, closely touching each other, with the palms upward, and then as the period is completed, the arms are swept backwards with energy, just as in the act of drawing the "ends" through the seam, ending in the backward sweep with the palms downward, but with fists energetically clenched. The blacksmith, in animated conversation, becomes equally characteristic. In his case the right arm is sure to assume the motions of the sledge-hammer, while the left is as sure to take the vibratory motion of turning the red-hot bar on the imaginary anvil.

Close observation will soon enable any one who has the taste, and possesses the talent to tell, almost at a glance, the peculiar occupation of almost any one. This kind of knowledge is often very useful, and saves one from the uneasy feeling, often experienced, of being compelled to say, "Well, there's something odd about that man's manner, I wonder what it is." The best school for this study is found in attending tradesmen's meetings, and the preaching and hortatory services conducted by local-preaching or peripatetic tradesmen orators.

6. *The Tradesman Gait.*—This contains or comprehends the peculiarity of walk necessarily arising from the habits of locomotion acquired or necessarily resulting from every kind of shopkeeping or trading. There is scarcely any mere peculiarity of walk that can be spoken of as distinctive marks of these trades. But in the ever restlessness of body and constant change of position, even when there is no object in such movements, we can at once detect the trader of some kind. If allowed, however, to take into account the movements of the hands, we can in numerous instances detect the nature of the trade. For instance, those engaged in retail occupations, such as employs them in tying up small parcels, are almost invariably, in unguarded moments, working with their fingers as in the act of putting up the parcel and tying the cord. Others again, in the soft goods or cloth trade acquire the habit of spreading out, and measuring, and folding up goods. Apothecaries can scarcely ever become animated in conversation without coming to the inward circular motion of the pestle-in-mortar. Booksellers invariably put down any dry article just as they present a book on their counter, placing it on the open edges with the back up.

Without pursuing this matter further, we may just remark that we have not attempted to exhaust the subject of the language of pedestrian and peripatetic locomotion; but merely pointed out enough to arouse the attention of the reader to interest himself in this most useful protective science.

SALUTATION.

No idiosyncrasy of character is more important than the manner of salutation. As is the salutation, so is the total of the character. In nothing do we lay ourselves so open as in our manner of meeting and saluting. In the various modes of salutation, every attitude of the body, as well as the wonderful variety of ocular and facial expression play most important parts. Let us consider some of the numerous modes of salutation that have become common in various countries of long standing and cultivated manners.

Of all the different modes of salutation in various countries, there is none more graceful than that which prevails in *Syria.* Here the hand is raised with a quick but gentle motion to the heart, to the lips, and to the forehead, to intimate that the person saluting is willing to serve you, to think for you, to speak for you, and to act for you. In *New Guinea*, the fashion is certainly picturesque; for they place upon their hands the leaves of trees as symbols of peace and friendship. An *Ethopian* takes the robe of another and ties it about his own waist, leaving his friend partially naked. In a cold climate this would not be very agreeable, not to speak of the loss of time it implies. Sometimes it is usual for persons to adopt the unseemly practice of presenting themselves naked before those whom they salute, as a sign of humility. This custom was put in practice before Sir Joseph Banks, when he received the visit of two *Otaheitan* females. The inhabitants of the *Philippine Islands* take the hand or foot of the person they salute, and gently rub their faces with it, which is, at all events, more agreeable than the salute of the *Laplanders,* who have a habit of rubbing noses, applying their own proboscis with some degree of force to that of the person they desire to salute. This custom had its origin, no doubt, in the feeling of comfort that the Laplander feels in the friction of the nose as a restorative of the warmth necessary to prevent the nasal organ from freezing. In *Arabia,* and all *Mohammedan* countries, inferiors in rank always kiss, or attempt to kiss the hand of a superior; equals embrace each other by putting cheek to cheek, as their thoroughbred horses do. In addressing their fellow-mussulmans, they use the common Eastern salutation, "*Es-salā'm,*" "*Aleīkum,*" which simply means, "God save you," or, "Peace from Allah!" Hence the Mohammedans dislike to use this salutation to Christians; and the Christians dislike it, as being a recognition of the faith of Mahomet. In formal visits among them, a good deal of etiquette is observed all over the Islām countries. Subjects are not allowed to sit in the presence of the Imām or Sultan. The higher classes sit cross-legged, like our tailors, while receiving company, and the inferiors sit upon their heels during an audience. In Christian countries the ordinary modes of salutation are bowing, curtsying, raising the hat, kissing the hand, and shaking hands. The passing salute of gentlemen on the continent of Europe, is the raising of the hat; of gentlemen meeting ladies of their acquaintance, to bow and then raise the hat; but if intimate, and stopping to speak with the lady, the bow, the raising of the hat, and then the shaking hands, or deferentially stooping and kissing the hand of the lady in an easy, gentle, graceful manner, scarcely touching it with the lips. The graceful bend of the gentleman's body is the chief thing to be studied. In England and her dependencies, the hand-kissing is not adopted except on very important ceremonial occasions, such as presentations to Her Majesty on levee and drawing-room days, and giving audiences, or making important crown appointments to office. The universal salute, however, adopted in all the most highly civilized Christian countries, is the *shake hands*. On this universal mode of salutation and adieu, we purpose here to make some observations, especially respecting its almost unmistakable test of character.

Almost every shade of friendly feeling is expressed by the shaking of hands. Let it be carefully kept in mind, however, that the shake-hands, on meeting a friend or an acquaintance, is the truer test of permanent character than the good-by shake. It is quite natural that the adieu-grasp of the hand should be affected by the conversation or words of greeting, and will vary in warmth and heartiness with the elevation or depression of the feelings during the interview.

This friendly custom must have commenced at a very early period of our history, but we have no hint in Scripture that this mode of salutation was practised in patriarchal or Christian times in the east. The earliest notices of such practice are found about the time of the second Crusade (A.D. 1144). The customs of salutation in patriarchal times were, bowing low, prostration, and kissing. The introduction of coats-of-mail armour rendered these primitive modes of salutation impossible. Hence the martial men adopted the plan of touching hands as a token of good will; and thus the touching or shaking hands became general; for the manners of military men have ever been considered models. The performance of this act of courtesy and good-will ought to engage the special attention of every one who wishes to please, as well as to comprehend the characters of those with whom he comes in contact.

It ought to be always kept in mind that while in the act of shaking hands one should look into the face of the person whose hand is grasped, were it but for a moment There is much delicacy of feeling expressed in the manner of grasping the hand. The thumb should be gently but firmly pressed upon the back of the hand you grasp for a moment only, if the meeting is casual; but after long absence, and in proportion to the former feeling and intimacy, the hand may be held for a proportionate length of time, and relinquished after a second delicate and meaning pressure.

The varieties of shaking hands, the peculiarities of clasping the hands; the expression of the eyes; the motion or toss of the head; the inclination of the body, all tell a tale of character on the one hand, and respect for others on the other side of the clasped hands.

One man gives you a warm, cordial, hearty grasp, looks you straight in the face, with a pleasant, open smile, and shakes your hand up and down, withdrawing his after a second earnest gentle pressure. With scarcely an exception you will find such a man an honest, earnest, and true friend. On the contrary, the man who gives the wagging, horizontal, millhopper shake, and lets slip your hand as if it were soapy or oily, will almost certainly be found selfish, cunning, and deceitful, ready to sell you the moment he can realize a dollar by the transaction. He will certainly prove an idle, selfish, and shiftless person. Be warned to have no dealings or intercourse with persons of this stamp. Sooner or later you will repent, should you fall into the snare. Now you encounter the speculator, or man of various occupations, sometimes requiring sudden and irregular attention. His shake-hands is hurried, indicating energy, haste, hurry, and the necessity for rapid decision in pursuit of his selfish aims. The speculator-shake may be further characterized by the perpendicular or the wagging shake, which will of course modify your estimate of the trust to be reposed in him. A quick shake or wag and sudden letting go the hand indicate a high temper and cold heart. Then, again, there are those who give the unmeaning touch, in a very lack-a-daisical manner, and never look you in the face. This is generally the characteristic shake of the fair-weather acquaintances, the casual friend—loose fish, as the Cockney calls them. As long as you sport a diamond or ruby ring, gold watch and chain, or have your shell made by the court tailor, and can shew a good balance at your banker's they will associate with you in a snobbish, friendly manner; but let reverses come, and then you test the swells of the unmeaning, namby-pamby touch and horizontal wag.

Want of self-confidence is mostly the cause of the timid, diffident hand salutation of the youthful maiden. Let your similar salute to such be courteous, frank, and kindly impressive, with that degree of freedom that will inspire trust and respect, but not so off-hand as to excite fear or mistrust. Such persons, in the middle and lower classes of society, rather like and admire an easy, jolly, outspoken man, provided always, that in all his free and easy salute and address there is the transparent expression of respect and esteem for the diffident maiden. Reserve and shyness is at a discount before their counter. It is, as they feel already, the article with which they are overstocked. A prudish shake evinces affectation in a repulsive degree. All persons of honest intentions and noble good-will thoroughly detest affectation, and never, by any chance, attempt it. It is a gratuitous intimation that those who assume the affected manner are willing to be liable to be taken for what they really are—worthless, transparent hypocrites. When thrown into their society, one should cast off all restraint, and assume a free and easy manner, and not deign to notice their affectation, but by every means plainly shew that you are incapable of catching the infection from them. Remember that affectation is the lowest recommendation you could carry into good society. You may just as well take plated dollars to the Treasury. Both are spurious coin, and alike suspicious as a circulating medium. Neither of them has the ring of the genuine character. No doubt, you have often heard of the luckless servant girl who was asked about her character, and naively answered, that she always carried it in her pocket.

Another and very common kind of person you may often meet, who, seeing you hold out your hand, also, by way of imitation holds out his, but with no other intention than that you should, if you choose, lay hold of the four loose fingers and either squeeze or let them drop, as you please. Just as there is no meaning or expression in his digital salute, neither is there character in the man. If you do, by way of experiment, give his limb a shake while you hold on by the four meaningless daddles, you have about the same sympathetic pleasure that may be experienced in shaking a dish cloth. Instinctively you conclude, even before the operation is over, no matter how brief, that he or she has no distinctive character. By way of refreshing contrast, let us think how delightfully inspiriting it is to experience the warm, hearty, cordial grasp of a true friend whose whole soul is, for the moment, in his hand and eye; he is sure, in his hearty and honest earnestness, to retain your hand for a second squeeze and additional wag. This class of shake is found to accompany true friendship as fully divested of selfishness as it is possible to expect. When you meet such natures, court their friendship and render yourself worthy of their confidence.

When men grasp your hand and look away from you, their regard for you is so trifling that you had better leave a blank leaf in your diary than write all you know or might learn of their true character. Could you only see their hearts you might perceive that significant little motto —*self*—indelibly stamped all over that vital organ.

Those who keep the arm or elbow close to the side while shaking hands, may be found to add deference to the expression of friendly regard, while reserve characterizes every feeling, and freezes the stream that otherwise might gush from their timid, uncertain, cautious souls.

Low bowing, while in the act of shaking hands, or while approaching to do so, if done naturally, indicates respectful deference. But observe that the hand is not worth grasping, when the tips of the fingers only are offered in salutation.

In shaking hands, until recently, when thin, tight, kid gloves became *the* thing in common wear by gentlemen, as well as ladies, it was the fashion to pull off the glove, even in the street, before shaking hands, or to apologize for retaining it on the hand. This having become so awkward on suddenly meeting a friend, it has become now almost obsolete.

The giving one finger in shaking hands is not to be tolerated in well-bred society, unless the hand is deformed or has been wounded, so that pressure might prove injurious. Should such rudeness be offered you, the best and quietest manner of reproving it is to present your own corresponding finger, but without touching the proffered unidigit.

Finally, let the whole hand, cordially extended, with the thumb upwards, give a firm, whole-souled, cheering, and friendly, expressive token of your inner feelings of love, gratitude, and sympathy towards a noble and generous being who has been formed in the image of the Creator. But avoid affectation as a greater enemy to the countenance than small-pox. This, with strained allusions and disgusting finery, are easily attained by those who are mean enough to wear them; they are but too frequently the badges of ignorance or of stupidity, whenever it would endeavour to please. Everybody knows that vanity and affectation are mother and daughter. Vanity is the sin, and affectation the punishment. Vanity is only fully developed when it blows into affectation, and then it is complete. Locke, the philosopher, says: "Affectation in any part of our carriage is lighting up a candle to our defects, and never fails to be taken notice of, either as wanting sense or wanting sincerity."

> "In man or woman, but far most in man,
> And most of all in man that ministers
> And serves the altar, in my soul I loathe
> All affectation; 'tis my perfect scorn;
> Object of my implacable disgust."—COWPER.

"All affectation is vain and ridiculous; it is the attempt of poverty to appear rich."—LAVATER.

THE EXPRESSION OF LAUGHTER.

"Nothing is more significant of men's character than what they find laughable."—GOETHE.

LAUGHTER, like weeping, is a sign of emotion which is confined to the human species.

The old proverbs, "Laugh and mend," and "Sorrow and die," intimate a true physiological principle, for few things are more injurious to the body than grief, or more healthful than laughter. Prolonged and hearty laughing has a tendency to promote the secretions and open the pores. It stimulates the whole glandular system, starts the perspiration, and increases the peristaltic motion of the bowels, so that those who indulge in frequent cachinnations are rarely troubled either with constipation or indigestion.

There are people who, from some mistaken idea of gentility, never condescend to laugh, yet Count D'Orsay, who in matters of taste was certainly an authority, said that "to laugh *well* is the sign of a cultivated gentleman." But even without his testimony, or that of any other man of social rank, we might rest assured that laughter cannot be intrinsically unrefined, since it has the mother mark of nature, and has, moreover, this to its fortune, that it contributes to good health. If a gentleman is never to laugh at all, because some clown laughs coarsely at coarse jokes, then he ought never to eat at all, since there are always vulgarians who gluttonize. Who that has heard the joyous, ringing laughter of childhood, or the rich, sweet merriment that ripples from the throat of a cultivated woman, could wish this sign of amusement to be relegated to the kitchen or the bear garden?

If people laugh coarsely and disgustingly, it is because they are coarse and disgusting, but as their minds and manners improve, their sense of humour will be correspondingly refined, and their laugh, like their voice, expression, and gesture, will assume a sweetness and nobility unknown before.

There are exceptional cases in which the smile is so ready, expressive, and varied, that laughter could add nothing to the humorous charm of the manner, however much it might contribute to the bodily health. This was the case with Henry Clay, who seldom laughed, but whose rich smile left little or nothing to be desired. Persons who neither smile nor laugh are usually fit for "treason, stratagem, and spoils." Blackhawk, who was never known to laugh, was one of the most blood-thirsty villains that ever led a tribe of savages to deeds of violence. The closing of the eyes, or squinting during laughter, is considered very ugly and underbred, but it is a sure sign of a jolly and whole-souled nature.

For convenience, I will consider the laugh as guttural, nasal, love-smitten, cheering, and hypocondriac. The former, which for some inexplicable reason is often described as the horse laugh, evidences strength of the passions as well as of the constitution. It indicates excellent lung power, and coming as it does forcefully from the chest, seems to be peculiarly beneficial to the physique. As a rule, the less subtilely intellectual the kind of wit or humour which is the occasion of a laugh, the more it agitates, and by consequence, stimulates the bodily organs. The coarse guttural laugh, based as it is upon coarse humour, is the ordinary laugh of the negroes, who usually enjoy good digestion, with strong assimilating powers. Massachusetts and Connecticut people seldom have this laugh, and dyspepsia is as common among them as is fever and ague among the Hoosiers.

The nasal or *te-he* laugh indicates feeble passions and light intellectual calibre. It is a kind of cachinnation so weak, so drivelling, and so unmeaning, as to be an offence to every cultivated ear.

People who have been disappointed in love's young dream, begin to laugh with some degree of spirit, but break off suddenly as though they had just remembered the awful nature of their visitation. Love disappointments depress the health as well as the heart, and whatever influences the health must affect the whole system, and with it the character of the laugh.

The *ho-ho*, or cheerful laugh, commonly evinces hopefulness and health, and hence it usually characterizes persons of the Thoracic form, who have ruddy cheeks and sparkling eyes. Such laughers are averse to a sedentary life; joyous and sunny, they see the rose-tint in every cloud, and although they may be crushed for a moment by disappointment, they are readily consoled and re-inspirited.

All hypocondriacs have a harsh and despondent laugh, which is sometimes more disheartening than a good honest groan. They usually commence their lugubrious merriment on a high key, and then descend, step by step, until they conclude with a deep, grave-yard grunt, which it is truly afflicting to hear. Those who have this manner of laughing, always see mountains, or quicksands, or savage beasts in their pathway to the city of fortune. They disparage every enterprise, and esteem no one but themselves true sons of the prophets.

Unrestrained and wholly meaningless laughter is one of the most obvious and repulsive indications of imbecility.

The English, who are noted for their good living and strong digestive powers, are also hearty and frequent laughers. When a joke is thrown out before an English audience, they roar and roar again, until the whole assembly is convulsed with mirth; but the man who has the hardihood to perpetrate a jest for the applause of the Scotch or New-Englanders, will see it sink like a stone into the water below the Niagara Suspension Bridge—it will fall "*kerchug*," and that will be the end of it.

HAIR.

Among the many evidences of character, whether physical or mental, few are more certain than those derived from the hair.

This natural covering is a modification of the *epidermis* cuticle, or scarf-skin, which contains neither vessels nor nerves, but forms a horny layer over the *cutis*, or true skin. It is thus accounted for that hair may be found more or less on every part of the human body, except the palms of the hands and the soles of the feet; the horny matter on those parts is all employed in constituting the epidermis, which is thicker there than on any other part of the body, because of the greater exposure to pressure and friction.

Every ordinary hair consists of two principal parts; the shaft, which projects beyond the surface, and the bulb, which is rooted in the true skin. When examined under a microscope, the bulb is found to contain minute cells, some of which are loaded with pigment or colouring matter, but all of which are abruptly condensated into hard fibres on rising into the shaft. This shaft is of true cylindrical form in hair which lies straight, but a transverse section of a wavy or curly hair appears somewhat oval. The colour of the hair seems to depend on a peculiar oil, which can be seen coursing through the central hollow, and serving, as it comes to the surface, to lubricate and soften the outer portion of the hair and skin. The wavy, transverse lines that appear on the outside are due to the single outermost layer of cells, which overlap each other. The bulbous root of the human hair, very nearly resembles that of some plants; and doubtless the nourishment which affords material for the constant growth of the hair, is derived from the body much in the same way as plants are nourished by the soil.

The peculiar characteristic in hair, that first and chiefly strikes the eye, is its colour; but we have also to consider whether it is straight or curly, coarse or fine, long or short, abundant or scanty.

Certain races of men have no variety of hair colouring; it is, and appears to have been for ages, the same; and this is generally black. No other is to be found among the American Indians or the pure Africans; and very rarely are lighter hues to be seen in those Asiatic races usually called Mongols and Malays. Variety of colour belongs preeminently to the Caucasian, or as some call it, the Japetic—that is, the white variety of the human species. One parent may have black hair and the other flaxen; while their children have brown. Such variety is sure evidence of civilization, as also is difference of complexion; it is the non-progressive races that transmit the same colour both of skin and hair from generation to generation. It is natural to expect that the colour of the hair should correspond with the complexion of the skin; because its roots, being planted in the *cutis,* derive their nourishment and colouring matter from the same substance which there contributes to form the complexion.

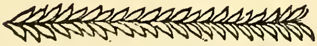
Also, the same climatic influences that act upon the skin, operate on the hair, causing it to be light or dark. The lighter shades are met with chiefly in mountainous regions; the darker in warm, low-lying countries. There are more fair-haired children in the mountains of California than in any other part of the world that we have visited. Light hair is common, also, in the Highlands of Scotland, and the mountains of Sweden. Even among the Negroes there are specimens of lighter hair in the more elevated districts, while the low lands of Guinea present only black. Red is common in the elevated region of the Alps; while black is the predominant colour at the foot of those mountains. The intermarriage of various races in temperate climates goes to produce varieties of colour in the hair. Black absorbs all the rays of light and heat; but white conveys them without loss to the interior. The hare, the ermine, and some other animals turn white in winter; and if this is caused by the cold, it is likewise a certain protection against it, besides rendering these animals more secure from their enemies, by the assimilation of their fur to the surrounding snow.

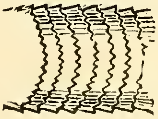
Among ourselves, red hair has usually been considered an evidence of quick temper; and doubtless this holds good as a general rule; yet many cases might be cited in which red-haired persons have been very amiable, and throughout a life-time have not been known to exhibit angry passions. This colour, however, may be taken as sure evidence of an active form; if curliness is added, it indicates an intense organization, and a disposition to ardent love. Very coarse red hair is a sign of propensities much too animal.

Auburn is indicative of a kindly and sympathetic nature, with much capacity for Platonic love. Fine brown hair is found only on persons of excellent minds, and generally intellectual tendencies; so, beautiful golden hair is rarely observed in individuals of gross and sensual natures. Such are fond of children; they love the fine arts, and generally have exquisite sensibilities, so that one need never fear a person with pleasant golden or auburn locks, regularly disposed and curled; for they bespeak a high standard of intelligence and kindliness. We know not whether it was from an appreciation of these symptomatic qualities, or from mere taste or caprice, that golden hair came to be all the rage in France a short time ago; so that many ladies who could not bring their own hair to this colour, procured artificial locks at any expense.

Glossy black hair, inclined to be wavy or curly, evinces keen perceptions, and usually a cautious, secretive nature. As a general rule, straight hair accompanies persons who go straight in walking, and whose bodies exhibit straight lines and angles, rather than curves and round turns. The mental character will be found to correspond; the curly-headed people are the more sinuous people, and hence the expression, "a straight-haired boy," meaning that he is honest and reliable, moving straight in his conduct, so that you know where to find him. Straight black hair evinces more or less stolidity, with a wiry constitution; and the same colour, if very coarse and curly, denotes much irritability, not without stupidity. Curly black hair, however, accompanied with blue eyes and fair skin, may be taken as indicating an excellent mind and good moral tendencies. Such were Dr. Lyman Beecher's characteristics. His black hair seemed to stand up bristling and curling on his forehead, to bespeak his great intensity of mind and clearness of thought; while the blue eye and white skin forbade one to associate with him those characteristics that are apt to attend such hair with black eyes and coarse dark skin.

The black hair of the Asiatic Mongolians, and the various tribes of Polynesians and American Indians, is generally straight and lank; that of the Negroes, Hottentots, and other African families is usually crisp and woolly. The


Filament of Wool.


Negro Hair.

African head has been considered as being covered with a species of wool rather than true hair. But Dr. Pritchard having carefully examined a number of hairs from the Negro as well as other races, in comparison with the wool of a Southdown sheep, reports that a filament of wool has a serrated or jagged surface, whereas the Negro hair appears only imbricated. It is for this reason that though hair will entangle to a certain extent, it will not felt into a compact mass like good wool.

The black, which is the predominating colour of human hair, is found by chemical analysis to depend on the presence of iron; while the lighter colours exhibit more sulphur. It is found that black-haired men can work in iron without injurious consequences, whereas the blood of light-haired persons has so little affinity for this metal, that handling it too much produces disease, from the infinitesimal particles insinuating themselves into their systems.

The grayness of hair in old age, arising from a deficient secretion of pigment, appears natural enough, when all the corporeal powers are weakened. But no one has satisfactorily explained how it is that hair has turned gray or even quite white in a single night under the influence of fear or distress. It has been suggested that some fluid, perhaps an acid, is in such cases secreted at the bulb, and percolating the hair, has destroyed the colouring matter. But how mental excitement should produce such fluid, appears still a secret.

We have had occasion to allude to the texture of hair in connection with some shades of colour. It may be further observed that coarse hair indicates strength of constitution and a courageous temper, while fine bespeaks weakness of physique, with sympathetic susceptibilities, unusual care, timidity, and withal, vivacity. The wild boar, which has been known to turn upon a dozen hunters, and the lion, which will attack a whole herd of elephants or buffaloes, are good examples of strong coarse hair in connection with physical strength and courage. On the other hand, animals wearing fine soft hair are timid and active, fleeing at the first appearance of danger. The deer and the rabbit may be cited as well-known examples.

Even the finest hair is strong and elastic, hence it is used to make fishing tackle, also to stuff beds, seats, &c. When dry, it is easily rendered electrical; but it attracts moisture readily from the atmosphere, and doubtless from the body also. When it was the fashion in this country for females to curl their hair artificially, twisting it in paper over night was usually sufficient, but a damp morning would oblige them to use hot irons before making their appearance in the evening.

Among different races there are great differences as to the quantity of hair that grows on the body. The northern Asiatics, and the American Indians are noted for thin hair and scanty beards; while in the Kurilian race there are individuals with hair growing down the back, and covering almost the whole body. Some years ago a hairy lady understood to be from Mexico, was exhibited in London, and her body was embalmed after death as a curiosity. The whole of the face, except the eyes, was covered with hair of different lengths. That on the head was straight, black, bristly, and very thick. The ears and the back of the neck were hairy, and the hairs on the shoulders and legs were as abundant as they are sometimes seen on very powerful men.

A heavy head of hair is considered a great ornament to a woman. Whatever the reason, the hair of Irish females, especially those of humble class, seems to grow much more luxuriantly than that of either the English or Scotch. Besides its undeniable beauty, abundance of hair is a pretty sure sign of a good constitution, and full or large animal propensities. Wendell Phillips and Horace

Greely are more intellectual than animal; they have very little hair.

At the International Exhibition of 1862, there was a beautiful specimen of hair, understood to be British, jet black, and measuring seventy-four inches in length. We are not informed of what length that lady's hair was, of whom a Persian poet of the tenth century has sung:—

> "At dead of night,
> The bridegroom, with his locks of light,
> Came in the flush of love and pride,
> And scaled the terrace of his bride,
> When as she saw him rashly spring,
> And midway up in danger cling,
> She flung him down her long black hair,
> Exclaiming breathless, 'There, love, there!'"

But we are glad to learn that he fixed his crook in a projecting beam, instead of accepting her self-sacrificing offer.

When the hair grows low down on the forehead, it is evidence of a good constitution and long-lived ancestry. A peak coming down on the centre of the forehead is connected with honesty of purpose, excellent observing powers, and, it must be added, fractious tempers. Andrew Jackson had this peak well marked. His high regard for his honour has rarely been equalled; and his temper was as waspish as that of a fractious horse, in which the same shaped peak of hair is observable.

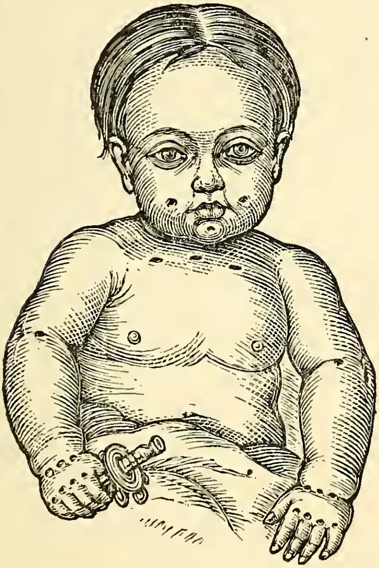
Nature supplies whatever is necessary for the preservation of life in the circumstances in which she places either races of men, or species of animals. She invests most of the quadrupeds with a thicker coat of hair in the autumn, and causes them to shed it in spring, when it is no longer required. Furs obtained in northern climates are, it is well known, much thicker than those of the temperate and torrid zones. The beaver, removed to warm latitudes, exchanges its fur, and the sheep its wool for coarse hair, suitable to the altered circumstances. On the other hand, the bear exhibits coarse black hair in moderate climates, but is clad with the finest white fur in the arctic regions. This increase of hair is produced by the effect of cold in obstructing the perspiration; for the matter which would otherwise have been emitted through the pores of the skin, is formed into hair. A warm climate, by relaxing the system and opening the pores, allows this matter to escape before it can be concreted into the substance of hair. Persons who produce but scanty hair and whiskers are best adapted to live in warm climates. They manufacture less animal heat than those whose systems afford a profuse growth of hairy matter.

Certain specific diseases occasion the hair to fall off, and no external washes will reproduce it in such case; nothing will do but the purification of the blood. Such disease has been very prevalent in America since the war; and in France, since the thirteen years of almost ceaseless warfare that preceded the banishment of the first Napoleon to the island of St. Helena. Some families, or portions of families, inherit a weakness of cutaneous blood circulation, which causes them to lose their hair at a comparatively early period of life. The effect of typhoid fever in causing the hair to fall, is familiar to every one; but it is not so generally known that a hard hat may operate in the same manner, though in a less degree, by its pressure on the veins which return the blood from the scalp, thus causing a feverish action in the integument of the head. In the theatres of New York, London, Paris, Berlin, and other cities, one sees hundreds of young men who wear dress silk hats, and are more or less bald. Smoking tobacco is undoubtedly another cause of baldness, the nerves of the skin being paralyzed by the fumes curling round the head day after day continually. O tobacco! where are thy charms? Broken constitutions, nervous shadows of manhood, hypochondriacal dyspeptics echo "Where?" and it seems almost an impertinence to mention bald heads in the same category with the graver evils resulting from this baneful practice. Dear youth of our land, be persuaded never to use it—no, never! While you read these lines vow to yourself never to begin its use; but if you have already commenced, resolve to be its slave no longer—no, nor its companion. Say "good bye tobacco, thou and I part here for ever."

Fifty or sixty years ago, Rowland's Macassar Oil was *the* thing for promoting the growth of the hair; scarce any other was known; and so firm was its hold on the public, that though the article itself has fallen into disuse, the coverings which are to save our easy-chairs from grease are called anti-macassars. Now the nostrums for saving the hair, patented and unpatented, may be numbered by hundreds, if not thousands. Among them all, however, there is none to be preferred to a good stiff brush, which, diligently applied, stimulates the scalp to healthy action, and to pour out the oil which nature itself has wisely furnished.

DIMPLES.

BEHOLD that beautiful child with its dimpled chin, cheeks, and round nose, and what could one imagine more lovable. Pure Platonic love is there personified in truth. Dimpled chins are ever found to be concomitant with warmth of soul feelings, love of society, and happy natures.



Love, Faith, Intuition, and Innocence.

All things in nature correspond and harmonize, and when the chin is dimpled the entire flesh of the body and face inclines to partake of the dimpled nature. The buttock of a child often will have dimples, as well as its legs, arms, breast, and neck, all evincing the merry and loving soul. When one dimple is seen, we at once draw the inference that the tendency of that whole system is to partake of the same character.

Superabundance of adipose tissue, with small bones and weak muscles, will so round out the form as to give it the dimply nature. These dimples will be found to shew themselves in the places where fat is least laid on, and by the filling up in the more natural places of deposit will leave dimples. Such persons as those of a dimpled nature will be naturally lovable, good-natured, fond of being petted, and extremely musical in soul.

Rarely do we see dark-complexioned people much dimpled. This agreeable peculiarity is more apt to accompany blue eyes, florid or blond complexion, and well rounded forms. You might as well look for lightning in winter, in temperate climates, or for grapes on the oak, as for dimples on some forms. Those lank, tall, and spare people, who are naturally so, and have always been thin, and ever will remain so, do not afford evidences of dimpled natures. Neither Abraham Lincoln nor the Duke of Wellington partook of this character. Lincoln shewed no particular devotion to music; and the Duke once remarked that no music was so sweet as a hundred cannons in full play (when you were in safe distance). They were built more on the angular shape, and neither shewed a fondness for being petted; but more freely bestowed than invited it from others. Principle, with them, seemed to surmount all other traits of character.

Large-boned persons rarely or never have the same warm, social nature as those who are more fleshy, with less framework. They are not so readily thrilled in every fibre of their beings with music, as people who have small bones, good muscles, and a large supply of blood and vital life.

A pebble cast into a lake, makes its further shore feel a ripple for that pebble; while, if it were thrown upon a solid rock, its influence ceases with its fall. Thus we see how persons who have much liquid and less solid parts of body are more easily affected and influenced by musical air-waves and social heart-beatings than the bony or, so to speak, rocky person. Such people as have large bones are more able to withstand the influences of peoples or communities than those having more of fibre and cellular tissue, and less of the osseous structure. There is no doubt that the small man or woman who so readily bends, in something like the French style of affability about you, is more controllable by the mind of another, and is more the creature of circumstances than the tall, raw-boned individual who uses no blandishments.

Washington, who stood six feet and three inches high, could handle two common men, and possessed strength and agility sufficient to jump twenty-two feet at a single leap, proved himself not the man to be controlled, even by his powerful British relations. Lincoln, who was six feet and several inches high, and was possessed of well-strengthened muscles and bones by early physical labour, when all the North were clamouring for the issue of the Emancipation Proclamation, stood like a rock, uninfluenced, waiting the appropriate time dictated by his cool spirit, and sanctioned by his judgment.

Men who stand pre-eminent in the world's history as great and self-reliant heroes, statesmen, and noted personages, have all had solid and heavy bones, where they have not been of more than average stature. That self-willed and ambitious man, by some known as the Great Napoleon, had a rough, bony face, much unlike the popular prints we often see in shop-windows, which, for the most part, are the flattering and insipid efforts of pandering artists, resulting in smooth-faced oil burlesques on the wilful character and face of the erst would-be king-maker and dictator of Europe. A gentleman, who was once an English soldier, and stood guard over Napoleon on the Island of St. Helena, has assured us, that "all the pictures and paintings of Napoleon are too smooth-faced, as he had the largest jaw I ever saw; large nose, massive head, with very little hair on it, and his beard was so thick, that when recently shaven it gave the skin a blue cast. His eyes were light-blue, and when roused, they spoke of a master-spirit. His general facial expression was very bony and masculine." No dimples ever graced his person. His spirit loved war, and powerful commotion, and terrible struggles, better than the social influence of children, wife (whom he so cruelly divorced to gain power), music, or home. What an indomitable spirit he possessed, and how little influence friends and the world had upon him, history and those who knew him best can attest. His pulse gave only about forty beats per minute, shewing how little action the soft parts of the body had, and his character gives evidence of wonderful power and recuperative nature arising from short, thick, and heavy bones. Julius Cæsar and Alexander were each bony and angular men, and how little they were influenced by, and how much they moved the world of mankind Hannibal and Scipio, whose legions and force of character moved the masses, were powerful in bone structure. Leonidas, whose braves drove the hordes, a hundred to one, before them, was inspired by the master-spirit, who was full of muscle and well set in bone.

A great law of nature is, that things are moved most which have material most easily acted upon, and as soft tissues and blood material are more easily acted upon than bones, so it naturally follows that men, partaking of the character of their bodies, are more solid in mind, and uninfluenced, if the bony structure predominates in their systems; whereas the dimply form (being only signs of a superabundance of fatty tissues) gives evidences of character easily influenced by all nature's forces. They are pleasant creatures of circumstances, loved by every positive and bony person as they naturally smooth and brighten the rough pathway of life. The following verses, and especially the last one, gives a very good idea where lasting dimples appear:—

"WHERE SHALL THE BABY'S DIMPLE BE?

" Over the cradle a mother hung,
Softly crooning a slumber song;
And these were the simple words she sung
All the evening long:

" Cheek or chin, or knuckle or knee,
Where shall the baby's dimple be?
Where shall the angel's finger rest
When he comes down to the baby's nest?
Where shall the angel's touch remain
When he awakens my babe again?

" Still as she bent and sang so low,
A murmur into her music broke
And she paused to hear, for she could but know
The baby's angel spoke:

" Cheek or chin, or knuckle or knee,
Where shall the baby's dimple be?
Where shall my finger fall and rest
When I come down to the baby's nest?
Where shall my finger's touch remain
When I awaken your child again?

" Silent the mother sat, and dwelt
Long in the sweetest delay of choice;
And then by her baby's side she knelt,
And sang with pleasant voice:

' Not on the limb, O angel dear!
For the charm with its youth will disappear;
Not on the cheek shall the dimple be,
For the harbouring smile will fade and flee;
But touch thou the chin with an impress deep,
And my baby the angel's seal shall keep."

MISERLY MARKS.

In modern times we use the word miser and miserly, only to stigmatize the self-inflicted poverty of the man who denies himself the good things of this life which he can well afford to purchase, but will not, because he prefers keeping his wealth in store. But the Latin word *miser* simply means poor or afflicted, and the other derivatives from it—misery, miserable, &c., we still use in the larger sense, as once in our own language a miser meant any poor or afflicted person.

We are to point out some of the physical developments, or rather non-developments of the man, who, as Bishop Herne describes him, "for the sake of gathering what he will never use, and adding to his beloved heaps, will forego the comforts, the conveniences, and almost the necessaries of existence, and voluntarily submit, all his days, to the penances and austerities of a mendicant."

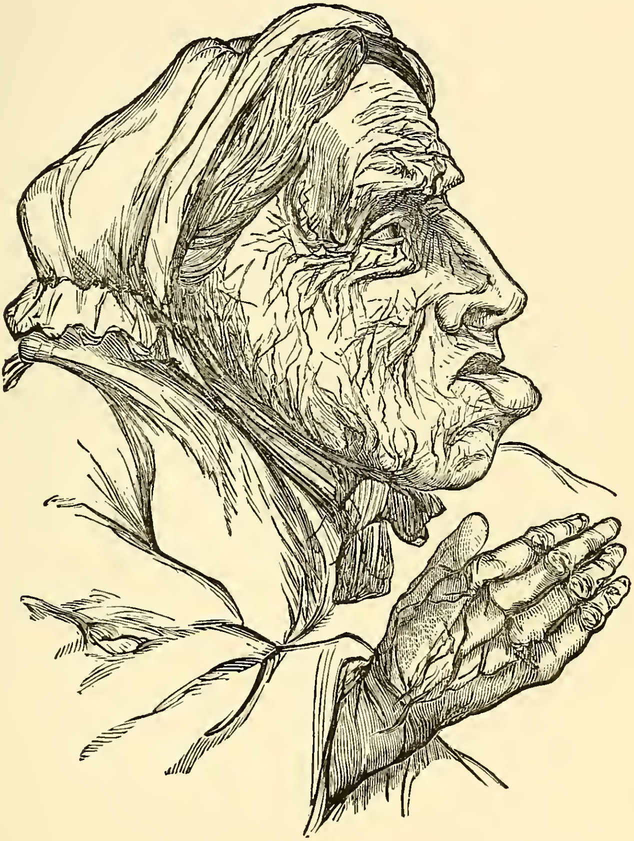
Commence, then, by observing the general configuration of the man. Let him stand up, and look at him attentively. Examine the length and general largeness of the body. In early and middle life, a person of these tendencies may be of at least middle size, staight and agile. But in declining years, the limbs, especially the lower ones, become contracted and the figure dwarfish.

We know not whether the miser's figure in Nicholas Nickleby is a portrait, but a gentleman in London, whom we shall call Mr. Berno Pudici, might have sat for it, or rather stood; for it is a full-length figure, and the resemblance is most striking in the thin, crooked legs and contracted knees, though also apparent in the contour of the head and face. This Mr. Berno Pudici counted his wealth by hundreds of thousands; there was no appearance of stint about his handsome dwelling; he gave away many hundreds of pounds every year, and had the reputation of being one of the most munificent Christians in England. Did one judge him a man of naturally niggardly disposition only because, in old age, he became personally so like Martin Chuzzlewit? No; though the most casual observer, uninstructed in Physiognomy, would instinctively have so judged him from his appearance, even if he had but seen him on a platform announcing a subscription of five hundred pounds. But a friend of ours happened to know a few facts about this profuse contributor to religious institutions. His house betrayed no meanness, because in early life he had married an open-handed lady, who kept him up to an expenditure suited to his position. He gave largely, because he had in early life made it a rule to consecrate a certain portion of his gains, probably the tenth, to religious and charitable purposes. But this was as much a calculation of profit and loss as any other of his transactions. He believed most firmly that the Divine blessing had rested, and would rest on his affairs through his doing thus; and as matter of mere self-interest he would not have withheld the stipulated proportion. But he took care to get his money's worth in public praise. All his givings were in the shape of subscriptions to societies; and rather large sums to a few extensive ones, than a scattered bounty to many. If there was a private case of poverty or distress, it was no use applying to him. In matters which were not to appear prominently in print, he was often heard to grumble that he had to pay; for, in truth, people seemed to delight in bleeding him. More than once, when it was announced that Mr. Pudici had promised to bear such and such expenses, the old gentleman might be seen fretting and fuming as if he were going to be ruined, and saying to those around him that he had promised no such thing. He was a singular, well-marked example of a man, at heart a miser, and carrying the tokens of it on his person, yet so controlled by circumstances that he obtained and delighted in the reputation of unusual liberality.

Nature always contracts herself when she would avoid an excess of liberality. For example, when it rains bountifully, all the vegetable world enlarges and increases, so that the harvest is abundant. A dry summer is stingy. Vegetation shrinks and contracts for lack of rain, and nature economizes the scanty fluids as best she can in bringing the grain and fruit to maturity. A similar process is observed in mankind. There are men full of sap, their bodies well supplied with the juices of life in all departments: like a rainy season, the life-giving waters largely preponderate in their constitutions. On the other hand, the opposite class exhibit all the attributes of a dry season. Parched and meagre, they look like beings whose juices have dried up within them. Thin, dry old maids, are always parsimonious and covetous, mean and stingy. Beware of trusting them; they live in single unblessedness, probably because they have cheated some poor young man of his heart, and now they will cheat you of your money if they can.

Miss Margaret Clephene seventy-six years of age, lives with several cats up four or five pair of stairs, in one of the old streets of Edinburgh. She is said to be rich, but she lives on charity, receiving ten pounds a-year from Trinity Hospital. The accompanying cut is from a drawing we got made while we conversed with her. Her poor old hands were dirty, because she could not afford soap to wash them. Her dress was miserably poor, but she has better for Sundays—the cast-off garments of a relative. Margaret

C. is not, in one respect at least, like the old maid we have described in this article. Margaret C.'s lover jilted her for a girl with more money. Such is often the more immediate cause of covetousness in elderly unmarried females.



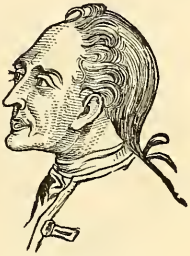
Miss Margaret Clephne.

It is impossible for a man possessing plenty of nature's substance in his body, to be stingy and niggardly in his mental character. You cannot find one—it is contrary to nature.

A figure merely deformed or dwarfed, indicates self-conceit; but it is the stiff, contracted, drawn-together expression of limb that betokens the miser. However observe the face especially. It has a mean, pinched-up appearance, the mouth generally, but not always, small, and the lips thin. Still more particularly examine the eyes. Abdominal eyes indicate a desire to live high, or rather, an anxiety to obtain something good to eat. The man addicted to gluttony will have a sleepy, heavy expression, precisely similar to the eye of an anaconda, whose nature is to stuff to repletion, and then sleep off the effects for weeks at a time. Gormandizing stultifies and stupefies the brain and nerves; this dulls and deadens the intellect, and the process is betrayed through the medium of the eyes. In the eye of the miser, on the other hand, there is a dry appearance around it, and a fulness beneath, with a peculiar wrinkle of round form.

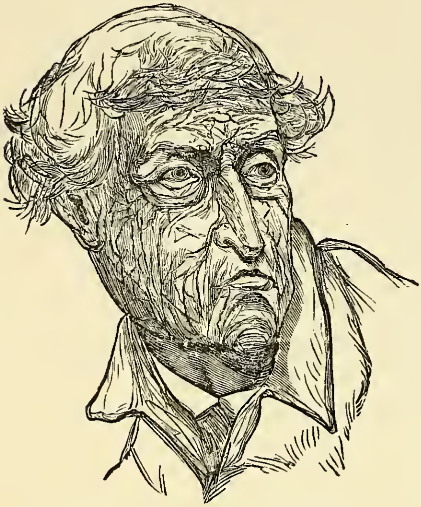
In complexion and colour the same saving disposition may be observed. Niggardly persons generally have little colour in their faces. They are like pale, dried peaches, they either never had any bloom, or it has departed, yet they may never have been visited by sickness. Illness often extracts the colour from lips and cheeks, as leeches suck the life-blood; or as long drought absorbs the moisture of the earth, causing the ground to crack and grow parched and pale, the bright herbage to lose its green tints and fade into the sere brown. So the droughty, stingy, mercenary, niggardly spirit in man or woman steals away the bloom of the cheeks, pallors the countenance, blanches the lips, and dries the eye. Soul and body are cramped alike; the geniality of social life is stolen away, and all the traces of open-hearted generosity have disappeared from the features.

In this cut, representing the celebrated miser, John Elwes, M.P. for Berkshire, you remark the features above described. He inherited the mansion and estate of Stoke, in Suffolkshire, from a miserly uncle, whose favour he won by always changing his ordinary dress for a meaner one before reaching the house when he went to visit him. The young man learned to be even a greater niggard than his uncle. His public position as a Member of Parliament required some appearance of respectability, and it seems he kept a pack of hounds; but one man-servant daily milked the cows, prepared breakfast, saddled the horses, unkennelled the hounds, conducted them to the chase, rubbed down the horses on their return, laid the cloth, waited the dinner-table, milked the cows again, and littered the horses for the night; yet Mr. Elwes stigmatized this man as an idle dog, who wanted wages for doing no work. To save fuel in winter, he would walk in an old greenhouse, or sit in the kitchen; would collect stray chips and straw, or endanger his limbs by climbing for a crow's nest to make a fire. When he had to travel, he rode on horseback, avoiding all turnpikes and public-houses; feeding himself on hard boiled eggs and dry crusts which he carried with him, and allowing his horse only the grass that grew by the wayside. Yet he sometimes advanced large sums to assist his friends; sometimes also tried his luck at gambling, and honourably paid if he lost. There was, as his appearance betokens, somewhat of gentlemanly feeling and self-respect about this niggard. He never married; but had two illegitimate sons, to whom he bequeathed £500,000.



John Elwes.

Another, and a much more degraded character, was Daniel Dancer, Esq., who died near London, in 1794, five years after Elwes. It is recorded that, during his last illness, Lady Tempest accidentally called upon him, and found him lying up to the neck in an old sack, without even a shirt.



Daniel Dancer, a miser and hermit.

On her remonstrating, he said that, having come into the world without a shirt, he was determined to go out of it in the same manner. When she begged he would have a pillow to raise his head, he ordered his servant to bring a truss of hay for the purpose. He bequeathed his house, with land worth £500 a-year to this lady; and when her brother took possession of it for her, he found, from time to time, large bowls filled with guineas and half-guineas, besides parcels of bank-notes stuffed under the corners of old chairs. The house had not been repaired for half a century, and was in a wretched condition. Mr. Dancer generally wore a girdle of hay to keep his tattered garments together; and his stockings had been so darned and patched that scarcely any of the original could be seen; but in cold weather they were covered with ropes of hay, which served for boots. Nevertheless, Mr. Dancer was rigidly upright in all his transactions, and would give temporary assistance to those of whom he had a good opinion; always, however, expecting interest as well as repayment. His faithful and only servant fared much better than his master, having whatever he chose to eat and drink, and a good bed to sleep on. Mr. Dancer had a sister of temper similar to his own; and a brother, who survived him, was said to be, if possible, more penurious.

You may remark that all over the face the wrinkles are short, save a peculiar and well-marked one situated under the eye. It has a striking fullness and clearness of development found only in such subjects, forming a complete semicircle, yet totally different from the fulness which marks those persons that have a great flow of language. This round and very distinct furrow is not inappropriately designated the miser's wrinkle, for it is always well-marked in such subjects. All niggards are not dishonest, as we have seen above, but men who are mean in their dealings, and prone to rascality in trade, are usually thus marked.

The characters of these two gentlemen are the more remarkable, because this excess of covetousness is not so often found in country squires, as in those engaged in trade and commerce. And it is worth while to take along with this remark, the fact that both of them were characterized by the integrity which in those days was expected from men in their position; also that their only deviations from the general miserly rule, as occasional gambling and hunting, were unlike what would have been recorded of men whose money was made by buying and selling.

It would be impossible to define and describe all the wrinkles to be found in miserly faces, for these vary according to the form, or combination of forms found in each individual case. But the grand distinctive mark of mean, miserly characters, is to be found in the strong rounding wrinkle under the eye. This will ever signalize the face of a niggard, as the union jack does the colours of a British man-of-war. All the other wrinkles will appear to be of an undefined character, not well marked, seeming to have neither beginning nor ending, but dying out gradually at either extremity, and thus continuing all over the face. I can liken them only to those on the skin of an old potatoe, from which the watery juices have been evaporated. You know how the rind appears in undefined wrinkles, by which I mean having no regularity, yet extending all over the hull or skin. Just so are the misers; no regularity; some here, some there, some deeper, some shallower; yet marking and furrowing the entire face in a very peculiar fashion, not to be mistaken when once seen, and never to be forgotten. The miser, therefore, is a husky, dry, shrivelled, and wrinkled being, precisely like a dried up plant, whose sap and juices have been exhausted by a burning sun or scorching wind. Like causes produce like effects. The face may be healthy, but if there are those short irregular marks all about it, you may suspect the subject of being capable of mean tricks as well as a petty economy. Such a man's character cannot be found out by feeling his head, for he may have been liberal once, and this state is perpetuated in the contour of the skull, which continues to indicate such trait of character. But the face changes with the habits, and there you may read the marks intelligently and without mistake.

Sometimes, but not often, the miserly signs appear in early life; more frequently the love of money comes in to fill the place of some other disappointed love, or to furnish a never-failing source of pleasure to the man who has exhausted other streams. John Foster mentions, as a remarkable instance of resolute will, a young man of spendthrift habits, who wasted a large estate in dissolute pleasures, and then sat down to gaze on the lands he had lost, and determine to possess them all again. Beginning to earn a few pence by whatever work he could find, regardless of its meanness, and to save every possible farthing, he succeeded in re-purchasing his estate, and died an inveterate miser. Like a plant, shrivelled and wrinkled for lack of moisture, would that once full and open face become pinched, and parched, and wrinkled, as his years advanced and his stores increased. For nature's rules are ever true, and may be depended upon. She shrinks and shrivels the skin of the face, when the mind and disposition of the individual has become close and contracted.

Again, some persons may be born of a very careful and saving, if not mean and sordid disposition, which by early care and education may, to a great extent, be overcome. But as a general rule, this is an inveterate mental disease; and especially when it sets in towards life's decline, and as the result of disappointment in something else, it grows and increases to the end.

> "Mammon's close-linked bonds have bound him
> Self-imposed, and seldom burst;
> Though heaven's waters gushed around him,
> He would pine with earth's poor thirst."—MRS. S. J. HALE.

None of the lower animals possess the above distinctive marks of miserly propensities, except perhaps some dogs which have wrinkled faces—and perhaps this is rather stretching the point. It is true that some creatures exhibit a hungry wrinkled appearance, but this is owing to the illiberal treatment they have received at the hand of man. Natural history makes us acquainted with the habits of several provident little creatures, that lay up stores for future use, but we do not read of any that deny themselves what is needful for present sustenance, or that accumulate except for a certainly approaching time of need.

HARMONY OF THE HUMAN FACE.

All nature tends to harmony, and the absence of harmony is simply produced by certain unequal conditions of nature. When the atmosphere is set in terrible motion by heat or cold, or the electric currents being out of balance, there is a want of evenness or repose in the effect, generating in some degree or other storm, confusion, and discord. So when the parents are thin-faced, large-brained, lank and tall, their children are generally fretful, short-lived, and have large heads. They are disjointed in mind, so to speak, because their parents from their very resemblance in approximate qualities did not, though outwardly alike, harmonize in reality, one with the other. To illustrate the meaning of this more forcibly. All the angles or prominent points of disposition and character in the one, stood out constantly opposed or in contact with their exact duplicate angles and prominences in the other, and to use an apt, though technical expression, never could be got to *dovetail* properly together.

Suppose twenty singers all join in singing "Home, sweet Home," or "Auld Langsyne," and one voice puts all awry by being a half tone above or below its part, there is at once an absence of sweetness, because harmony is wanting.

A beautiful and well-balanced child is only the effect of loving parents, and the happy ante-natal surroundings of the mother.

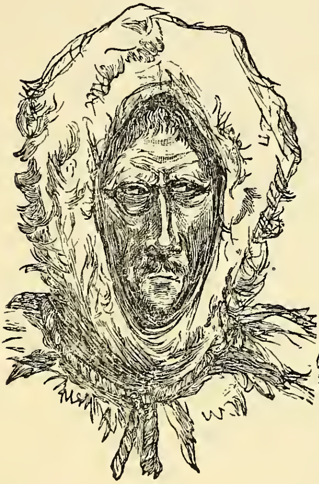
One parent being of a round, full, and vital build, and the other being of a tall, slim, and nervous make, their offspring in all probability are, or will be, well-organized and loving children, because the combination of the parentage, just described, conspires to produce love between themselves, and loving, healthy, and well-organized children.

When fierce, consuming lightnings dart and flash across the weeping heavens, at each volley of the Omnipotent's artillery, causing the dreaded tones to reverberate from mountain tops to vales, there is clearly indicated a want of balance in the electrical forces of the atmosphere.

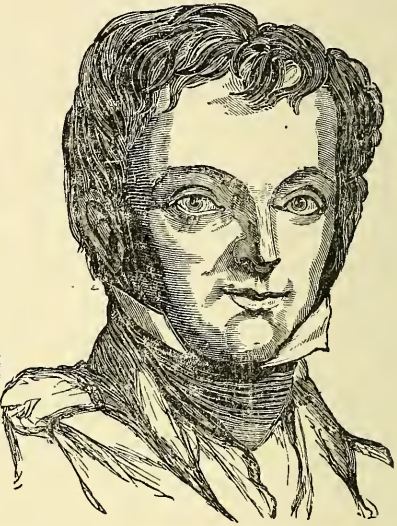
When the little child totters along over the carpet, a straw may trip the little "toddler," and he or she may be thrown out of balance. A slight offence causes a whole family to quarrel, and inharmony, to use no stronger word, is the consequence. Where the forces are strong, and a pure and soul-deep affinity exists between man and wife, powerful incentives to quarrel may arise, but peace will prevail and still reign in the ascendant; but where two of the same hot temper and nervous build are united in wedlock, there will be disagreement, and unbalanced families are the ultimate result. To produce or retain balance or harmony in families or offspring, only such persons should marry as can see a difference in shape of features, body, and general physiognomy. Slight things and conditions produce balance, and other feeble and wrong variations produce inharmony.

All faces long from the top of the forehead to the bottom of the chin and very narrow, are certain evidences of unbalanced minds.

This face of David Duncan is entirely out of harmony, and he would find few of mankind with whom he would wish to become familiar, or enter freely into sympathy with. Were his face more full on the sides, it would enable him the more completely to be a "man of the world," by entering into universal brotherhood of feeling more easily than a long slim face is able to do. The face of David Duncan denoted him cold, unsocial, distant, and of feeble constitution, whereas Washington Irving was one of those approachable and social men who loved and was beloved by those who knew him. History says he never had an enemy. His face is just wide enough for its length, so to speak, that is, of "good proportions." When we see a house four stories high, and twenty-two or twenty-four feet wide, like the one on Fifth Avenue in New York, opposite Central Park, we are forced to exclaim, how much out of proportion seems the fearful structure, and how dangerous it looks. The important feature of this otherwise well-finished and costly mansion is inharmoniousness. Often in observing men, we see four-story faces which are three times higher than wide, and they serve to jar on our understandings while we view them. Their predelections are to abstruse thinking, and in some things



David Duncan, Hermit of Michigan.



Washington Irving.

they may be very sound and vigorous, while in the majority they are very weak.

To be in harmony should be our constant aim, not only within ourselves, but with all the world. This condition of body and mind is a great promoter of longevity. When the head and brain are well balanced, that is, the head not too large for the bodily support, and the body not too strong in its vital powers for the size of brain it supports, then there is harmony between the brain or mental power, and the body or physical, and old age is more likely to be attained by such organisms than in unequal systems. A machine which runs true, each wheel smoothly performing its part, will last a long time and be productive of much good. If one wheel jars or is out of proportion to the rest, the machine will accomplish very little useful work and soon wear out. So it is with an individual. If each organ is in harmony and proportion to the entire faculties of mind and body, the result is usefulness and long life. We should be surprised to look at a very old man and find a want of harmony in his body. If such cases do exist, they are exceptional, and only prove the general law the more true.

The great object of life should be to develop harmonious offspring, and this same condition within all mankind. To know how to produce this pleasant state within ourselves is a knowledge, if well used, which possesses the key to all true happiness. When we speak kindly to others, we not merely please them, but give ourselves a conscious feeling that we have done right, which kindles the fire of human love in our bosoms, with which we burn up the stubble of our last crop of hate. If we speak to another harshly, irritation is produced, which not only throws us out of peace with the person spoken to, but with ourselves also.

We should never harm a worm or bird, and should never needlessly hurt any of the living things of earth.

"The coward wretch, whose hand and heart
Can bear to torture aught below,
Is ever first to quail and start
At slightest pain or equal foe."

The shooting of robins, larks, sparrows, and thrushes, or any of the hundreds of harmless birds, which so sweetly trill their musical notes in the air of mountain or valley, and break up earth's monotony by their lively presence, is not only a pitiful sight, but is destroying the very instruments intended for the promotion and encouragement of melody and harmony within ourselves. Their mellifluous voices are attuned by nature to be in unison with the soul of our higher manhood. Then why deal the deathblow to that we need to fraternize with our natural instincts?

Should we meet with loss of friends or property, we should not for a moment permit our tranquillity to forsake us. All individuals who live to an advanced age are pacific in their natures. Nations are like persons. If they are in turmoil and contentions, their days are shortened thereby. Polemics and logomachy should be most studiously avoided to promote tranquillity of mind and amicable nationalities. Let nothing ruffle your temper. Cultivate *patience,* as it will promote your highest happiness here as well as hereafter.

Harmony in music is succession of sounds pleasing to the ear, so combined that one sound fully agrees with all others made at the same time. Where the properties, relations, and dependencies combine in a pleasing manner to the ear, it is called harmony. The music of the spheres was the harmony which the ancients imagined to be produced by the accordant movements of the celestial orbs.

Melody in music differs from harmony in this manner. Harmony is pleasing sounds agreeing with each other like the several parts of a tune, and melody denotes the pleasing alternation and variety of musical and measured sounds as they succeed each other in a single verse or strain. Melody consists in a succession of single tones, and harmony is a succession of chords. Music rarely fails to produce a soothing effect on the mind of man—

> "Lulled with sounds of sweetest melody."—SHAKESPEARE.

Harmony is the just adaptation of parts to each other in any system or combination of things, or in things intended to form a connected whole, as the harmony of the universe.

A man, to be a good citizen, should be in harmony with his family and the whole list of his acquaintances, and particularly his neighbour. Be consistent and agreeing in your nature, and discord will fade away like friends when adversity drops her mantle upon you. Nothing, in our belief, can produce such a fine feeling and so completely harmonize a family as vocal music.

> "The harmony of things
> As well as sounds from discord spings."—DENHAM.

The harmonious face is a study like a smooth, running river or placid lake, pleasing to behold, not a ripple or wavelet to be seen. Discordant faces stand in relation to harmonious faces as the braying of an ass does to the sweet tones of a flute. The face which would present to us such pleasure, that we would feel in the vicinity of happiness and cherish good-will towards others, must contain a decided expression of harmony. The calm and repose which accompany such is like a quiet summer day—genial and complacent — the atmosphere fragrant, full of everything inviting, and impregnated with contentment.

The being possessing harmony is never an envious person. There is nothing on earth more precious than harmony. It never kills, pilfers, or falsifies, and is full of hope and cheerful contentment. It commands respect, gives one the power to perform the duties of life well, and draws around the possessor sentiments that may cheer the heart of millions. It sheds a halo of fondest recollections on the weary pathway of life.

To be attractive and beloved by the world is one of the best proofs and testimonials of a well-balanced condition of mind, and nothing gives so much power to a speaker as harmony. Good feeling is like a summer day. Oh how delightful! It is pleasing to everyone. So it is with the man or woman who bears a large amount of harmony. "What a nice speaker: I like him; he is splendid," are the expressions used in regard to such. Any man who lives much in the mind of the world, and who gives to the world pleasant recollections, must be possessed of large concord and harmony, and, to be an attractive person, one requires harmony.

To be a good musician, requires that the whole qualities of your mind and body be in perfect agreement. A good speaker needs it. To succeed in the enjoyment of this life it is necessary; and an entire book could be written on the beauties of harmony. Heaven is harmony, and hell is discord, and the Devil is the irritator. There is nothing like contentment to produce, and discontentment to decrease harmony.

The best construction of harmony is where all the elements of one's constitution are fully blended into one grand whole. What gives the ocean its billows and sound? The commotion is caused by the irritating effects of the wind. What produces the uneven surface of the earth? The boiling and seething fires below.

The signs of harmony in the face are that one part is not too prominent or too much sunken for good proportion with the other parts. Well-defined and even features are marks by which the mind's balance can be determined. Everything must be well proportioned and well rounded to give natural harmony. It is an easy matter to read the harmonious person. There is so much in his bearing to tell its power. Where we find a face all hollows and wrinkles, or too fat and smooth, it savours of inharmony.

To have full grain requires a good season, pleasant weather, rains, and sunshine. So it is with man possessing fulness, for harmony implies an equal fulness in every department. Now, to produce good full grain, also requires good soil on which to grow and good seed to grow from, with pleasant surroundings to bring it to maturity. So an harmonious person requires the same conditions. To produce fulness requires healthy parents, and proper and pleasant surroundings to develop the germ, and to maintain this condition it requires peace, joy, and hope; they being the necessary accompaniments. We have thus very much the means in our own hands to produce harmony or discord.

We would now make a few remarks on music. As music is simply the result of harmony of organization, so it can be consistently treated under this head. Harmony of all the forces in man is the producer of melody, and music is nothing but successive melodious sounds in harmony with others made at the same time. Jenny Lind, Cannissa, Parepa Rosa, and Lucca have harmonious faces in a high degree, and they are the greatest singers of the age. Having harmony in themselves, they can give it out. Where it is entirely absent, a person can, in no wise, give it forth. Those who have no harmony in their structure cannot give out the article to others. Harmonious faces succeed in capturing the hearts of thousands by their sweetness. No woman ever travelled in America who had so many admirers as Jenny Lind.

A person possessing the constituent parts of the body in balance, by the proper adjustment of all the parts, is capable of the highest and most captivating music. Lowell Mason, of Boston, is a splendid type of this; whilst Chickering, the inventor of the Chickering piano, is also of musical make.

The Germans are noted for their musical abilities. Beethoven, Mozart, Handel, Bach, and Hayden. were all full and well balanced. Hence the origin of their soul-stirring music.

There are three kinds or parts of music,—the soul, the science, and the performance. Jenny Lind seems to have had the whole three parts in a high degree. It is the soul of music, so to speak, which captures and entrances more than all the others. Ole Bull has a face of perfect harmony, and he has said that when playing one of his most heart-touching pieces, he has felt it more than his hearers. Paganini had a thin face, yet it was well proportioned, and his perfection of nature drew itself out on his skilful bow.

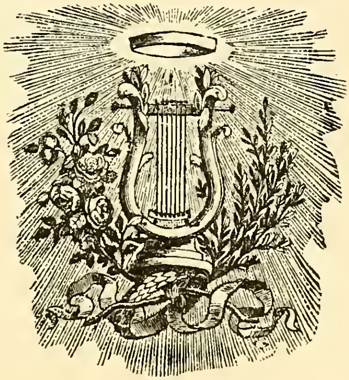
What on earth can so fully touch the sympathies of man as some plaintive song, sung with heartfelt pathos. Even the beast has been moved by its charming power. Our churches, knowing well its talismanic influence, use it with full effect. Public meetings and private family circles alike claim its aid. Theatres and all places of amusement pay high to secure its effect, and every house is lonely without the power of this grand, equalizer.

When the low, melifluous, pliant notes waft across some quiet river at evening's mellow hour, what mortal so poorly organized that his heart beats not wilder in his breast at the sounds, as each air wavelet assures him over and over again, that his soul feeds on the perfection evolved by another.

At no time has our soul risen higher in ambitious aims, than when the tones of sweetest music thrilled each fibre of our body. Often in such moments have our aspirations for great good bounded higher than meridian sun, and carried judgment with them, and then! oh, then! we have felt as if melody had lifted our soul away from earth to all the bliss of heaven.

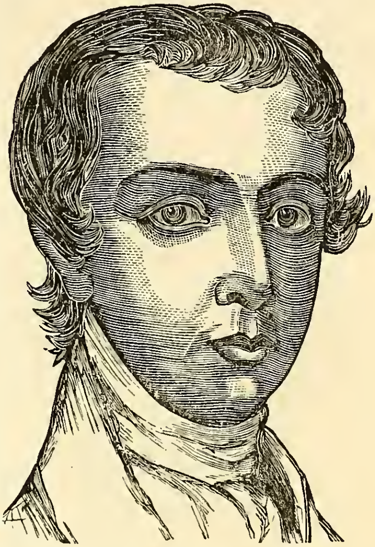
Pope has aptly unfolded music's charms in the following beautiful lines, which, we think, we cannot do better than close our present subject with:—

"By music, minds an equal temper know,
Nor swell too high, nor ever sink too low;
If in the breast tumultuous joys arise,
Music her soft assuasive voice applies;
Or, when the soul is pressed with cares,
Exalts her in enlivening airs.
Warriors she fires with animated sounds,
Pours balm into the bleeding lover's wounds:
Melancholy lifts her head,
Morpheus rouses from his bed,
Sloth unfolds her arms and wakes,
List'ning envy drops her snakes;
Intestine war no more our passions wage,
And giddy factions bear away their rage!"

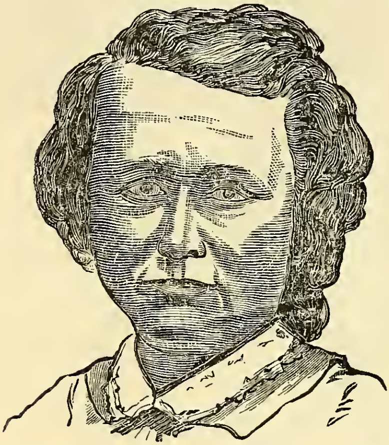


MASCULINE AND FEMININE FACES.

THERE is a sex of the soul as well as of the body. Every living creature is masculine or feminine in its inward nature as well as in its outward form; and not seldom is it found that a masculine spirit dwells in a woman,—a feminine one in a man, and in every case the configuration, especially of the facial features, will surely indicate the fact to the attentive mind. A large mouth, a beard, a strong nose, powerful chin, broad forehead, and prominent bones are characteristic signs of the masculine. A small, straight nose, well cut mouth, rounded chin, moderately wide and receding forehead, smooth skin, the adipose tissue filling in over the bones, and well rounding all, are forms recognized as feminine, and if observed in a man, will indicate his gentle, soft, and yielding nature. So of other parts of the body. A man with narrow shoulders and large hips has to a certain extent the female form, and his character will correspond. The reader will notice the facial expressions of men who resemble John Summerfield, or Milton the poet. John Summerfield was called the beardless boy by a sexton of Boston, when he first appeared as a preacher in America: the fine feminine expression of his loving face unmistakably indicated the soul within. But observe a woman who, besides the features we have described as masculine, exhibits very broad shoulders, and you will find she partakes largely of her father's character, or that of her grandfather on her father's side of the house, and consequently has masculine traits of character. Such a woman often says to herself — perhaps she dares to speak it aloud— "I wish I were a man." She feels, if she does not utter that great principle within, which looks out unmistakably from her face, "I feel my superior strength, and wish that the customs of society would permit me to assume my natural sphere in life; to be occupied as men are, in heavier, coarser, and more rigorous employment; to undertake duties, cares, and responsibilities that would fully call out and satisfy my pent-up soul. Although I am a woman, I have the ardour, judgment, and reason of a well-sexed man." Such has been the thought of many a woman, whose strong features and masculine build betray her dispositions whether she expresses them or not.


The Feminine Face—
Rev. John Summerfield.

Can we find any cause for the contrariety which sometimes occurs between the sex of the body and that of the soul? What gave to one woman a large nose, strong mouth, broad forehead, masculine chin, and rough-lined features; while her sister, who has been reared in the same family circle, with the same surrounding influences, has a fine rounded, feminine-looking face, her head and body delicately moulded, her skin smooth, all her features bespeaking in their own soft, quiet language, that here are womanly sympathies, keen perceptions, quick sensitiveness, love, faith, imagination,—all the attributes of true womanhood. The first is her father's girl. She loves to drive team, if rural life be her portion. Often she will be seen with the dog, chasing the cows at night; or she is away in the early morning climbing the mountain-top to halloo to a friend on another summit; romping through fields and forests at her own wild will; and impatient of nothing so much as of inactivity. To sit still and sew is to her a dreary imprisonment; the duties of housework are drudgery; her true great manhood loves no restraint, dictation, or parental care. These two girls have been distinguished by this difference, both of feature and character, from their earliest years. The feminine attributes were not given to the one, or taken from the other by any process of education or influence since first they drew the breath of life; and so we are shut up to the conclusion that some controlling influences in their mother's pregnancy have set the mark on their character, and stamped their whole being, the one for one course of life, the other for the opposite.



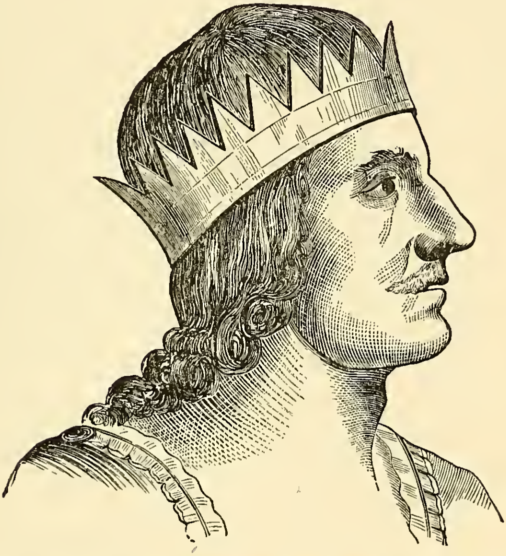
The Masculine Face—Miss Rosa Bonheur, the noted artist of France.

Doubtless, while a child is in *utero*, the mother may exert an all-powerful influence over its character, and thus mould its Physiognomy. Many mothers in our land, understanding this principle, procure the portrait of some noble-minded man, hang it in their room, look at it often, and call to mind the deeds of him whom it represents, thus marking their child more or less with the like spirit and features. Thousands could do the same, if they recognized the principle, and possessed the faith and patience requisite for working it out. Suppose a mother, when three months pregnant, or after the sex of her child was established, should place before her view the likeness of a boy, and fixing her mind steadily on the picture, with an earnest and believing desire that the child she then carried should be similar to that boy; then, if it proved a female, there would probably be considerable resemblance to the other sex, and as the girl developed into womanhood, her Physiognomy would appear masculine, and her whole nature possessed of much of that vigour that belongs to manhood. This is the manner in which many children are characterized for life; and mothers cannot too earnestly consider these principles, or too carefully apply them for the benefit of unborn generations.

Pleasant surroundings for an expectant mother are of immense value to her offspring; whereas, if disagreeable people crowd about her, or any deformity is daily obtruded on her notice, a misshapen child may be produced in the latter case; and in the former, a sourness of temper that no future influences can counteract.

Some children have something both of the look and manner of old people, in consequence of the mother's having been much in the society of some aged person who made a strong impression on her. And as the features and manners, so the tastes of the future man or woman may be greatly influenced, if not entirely formed by impressions made on the mind of the mother previous to the birth. A single impression, indeed, will not often avail much in the formation either of feature or character, unless it be sudden and vivid, as in the case of fright; to prove powerful and lasting, they must be frequent or continuous for months. A happy home, an agreeable partner, cheerful company, fine paintings, music, and well-read books, will conduce to give the child harmony both of mind and bodily feature,—it will prevent idiotcy, and ennoble the nature of the unborn *homo.*

There are people who have features partly male and partly female. Such persons exhibit phases of character seemingly contradictory. There are few that they can love, but those few they love devotedly. They will generally be found sensitive, ambitious, and passionately fond of music. But where sex of soul as well as body is strongly marked, we perceive the attraction and repulsion that characterizes other forces of nature. Individuals strongly marked as masculine are repelled by masculinity in others of the opposite sex, but are attracted to the soft and gentle natures. A large, coarse woman will be attracted to a man whose features bespeak a feminine soul; and *vice versa.* So a thoroughly manly man seldom fancies an amazon; but a soft fellow adores a woman of masculine character. One seems to contain the positive, the other the negative; and according to the well-known law, two positives or two negatives repel each other; whereas a negative attracts and is attracted by a positive. This attraction between the positive and negative may be observed any day in large families. Where there are many to choose among, the two brothers, or two sisters, or brother and sister, that draw together in the closest love and confidential friendship, are never characters of like strength or similar temper, but always contrasts. The strong natures are apt to quarrel with each other, and so are the weak ones; but a rough nature and a gentle one draw close together. This law of nature ought to be well understood, and respectfully obeyed by persons contracting marriage. Considerations of interest or convenience will prove a poor substitute for the suitability that is found in nature.



Egbert—King of the West Saxons, first monarch of all England.

SIGNS OF PHYSICAL STRENGTH.

This, of all subjects, is the one which demands at our hands the closest and most scrutinizing investigation. In order to fathom its depths by logical sequence, we must turn our attention to natural phenomena. *First,* the question has been asked immemorially, "What are the constituent signs of physical strength?" And need we state here that the answers in almost every instance have been more obscure than accurate. In tracing this important question on scientific grounds to its base, we cull our experience from close observation and years of unremitting labour. Not the labour of books in its entirety, but that of personal inspection, passed amid the mineral, animal, and vegetable kingdoms. Indeed, if we would study nature's laws, we must drink from nature's cup, otherwise our knowledge in a great measure will be merely superficial, and wanting in accuracy.

For all that we learn of character, science, or art through books, mother Nature is our only re-modeller, in point of fact our true teacher, and to her we must fly if we would attain that true wisdom which the marks of time can neither mar nor obliterate.

Having, then, got thus far with our introductory, it remains for us now to prove that our sequence is not only logical, but based firmly on that surest of all foundations—Truth.

Now, in order to deduce proofs of what we have endeavoured to advance, we take up the first point of our assertion, and one of the most useful of all mineral productions, viz., granite. This rock has been apparently designed by nature to enjoy a high and lasting reputation among minerals. In texture it is harder than soap-stone or slate, and consequently more durable, if not more flexible in its construction. The physiognomical differences of granite, too, compared with shale, slate, sand, chalk, lime, coal, or any of the softer materials of rock, are in nature the most striking. It possesses an extremely rough surface indeed, and so unlike the minerals to which we have alluded, that the contrast is great and wonderful.

Without entering further into the appearances and endurance of granite, we next take up the diamond, the most valuable of all mineral substances, and the hardest and strongest of all rocky materials. This latter, until it is cut into ornamental shape, possesses, like its predecessors, a rough and uncouth exterior. Also is it thus with quartz-crystal and spar. These last productions of the mineral kingdom bear a glass-like propensity of texture, and are equally hard, though consisting of sharp projections which, with their smooth planes, give them more of a rough and broken appearance.

Therefore, laying aside the constituent parts of the mineral kingdom for the present, having first adduced enough of facts therefrom to explain and work out our deductions, we may now enter upon the vegetable world, and unfold other evidences as the truer signs of Physical Strength. The monarch of vegetable life, then, is well understood to be the oak, and a right regal tree indeed is this gnarled and vigorous member of the woody family, shooting high and wide of its compeers in brake as in woodland. Note its rough and wonderful massiveness compared with the beech, or the pine, or the ash; contrast its hardness with the smooth poplar or the graceful willow, and you are compelled at once to acknowledge that it is by far the most useful, if not the strongest and hardest of all vegetable productions.

Thus step by step we proceed with our logical sequences until we advance a trifle nearer the human family.

Let us now observe the animal kingdom as a further proof of the foregoing allusions relative to Physical Strength. The next link in the chain of evidence is the lion, Anglicised from the Latin (*Leo Barbarus*). This animal is considered to be, and justly, too, we imagine, the strongest beast of its size in the world. Compare it then with the ox (*Bovidas genus*), selecting, of course, one of the same size and weight, and you will perceive the rough hairy appearance of the former in wonderful contrast with the comparatively smooth surface of the latter. The difference in this respect is not only strange, but striking to the common run of humanity, and furnishes the intelligent food for well digested reflection. The subject, to the general reader, is also comprehensive and important.

Now, by these fundamental deductions, you will observe that a rough exterior among animals, rocks, and vegetation is, at least, one indicative sign of Physical Strength. But we proceed to prove a far better analogy yet, and, indeed, one which will bear tracing through all the various grades of organic and inorganic life. In proof of what we assert, we will once more dwell upon the mineral creation and add another link to the yet severed chain of our connections. For instance, take the diamond, the richest jewel of all the mineral species. Compare it with the slate. The one is a broad form of stone of extraordinary hardness and brilliancy, while the other is flaky and will readily divide into long thin stripes which are as easily broken with but slight provocation.

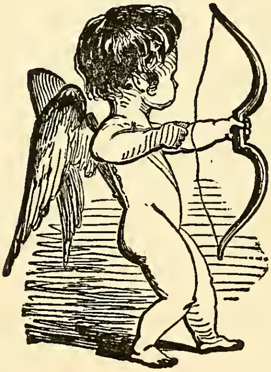
This is the case with almost everything of a very weak texture, unless it possesses great powers of elasticity, or is kept in constant action by other forces, through which means it sometimes becomes firmly imbedded together. Action, we assert, is the great condenser of nature's mineral arteries; therefore we perceive that granite, on the other hand, unlike its far-removed relation slate, is a broad and vigorous stone, if we may use the expression, and will not so readily yield to the cleaver's iron and maul as will its softer and less condensed kindred. The slate being more sectional than solid, is hence liable to be sundered with less effort. Diamonds being the hardest, if not densest, of minerals, are in consequence broad in proportion to their length. Again, the oak tree is broad and short compared to the pine or poplar, and, as our deductions go to prove, far stronger than either of the foregoing. Also is the manseneta of California very low, broad, and extremely hard. The strength of its fibre is known to be remarkable, and its durability wonderful. Again we have the weird and knotted elm, with many of the qualites of the oak, being like it broad and low, and in comparison with poplar, pine, sequoya, or fir, apparently ten times as strong and tough in its texture.

Having thus far worked out our assertions relative to the most striking signs of Physical Strength evidenced in the physiognomical relations of the mineral and vegetable kingdoms, we once more revert to the animal creation.

To retain the thread of our reasoning and make our analogy plainer to the general reader, we assert that the lion's strength and courage is based on the plan upon which he is built, and that is the low and broad principle. First, his face is wide and short, while his foot is as equal in its breadth as in its length. The wide, deep quality which gives strength is the peculiarity which pervades his nose, head, and entire frame. Compare a lion with the antlered deer, or the timid rabbit with the ferocious bear, or even the gentle giraffe with the treacherous and merciless tiger, and you will immediately perceive that breadth of neck, head, face, feet, body, and entire make produces strength.

The grizzly bear, the fiercest and most destructive animal on the American Continent, built also on the broad and massive principle, has been known repeatedly to carry off an ox or mule, weighing several hundred weight, over rocky and broken land; and indeed in numerous instances has this animal been observed to walk along a dangerous log extended across a precipitous chasm with a full-grown horse in his mouth. But the tiger is another example of this tremendous muscular power and fierce energy; and when compared to the round and puny build of a sheep, the contrast is no less astonishing than striking. The tiger, of all animals, is perhaps the most active. His strength is proverbial. Indeed, he has been often known to prostrate and kill an ox, a zebra, or even pallah with a single stroke of his foot.

Now for the last, but not least of our proofs, on the subject of Physical Strength. The main link of the great creation is man. The link that binds our philosophical, but as yet severed connections in this article, is also man,—the most glorious, the most perfect work of the Creator. Men, then, who are notedly strong among their fellows, are constructed on the wide plan. An illustration of this, which, by the way, comes accidentally across our memory while we write, is Dr. Windship, of Boston, a man of most extraordinary physical powers, broad and deep through the chest, having hands and feet in unison with the make of his body. In this gentleman the broad and massive is in every way predominant. In the gladiatorial bouts of Rome's most glorious days, when her councils swayed half the then known world; her athletes were distinguished by those infallible marks of strength, breadth of neck, face, head, shoulders, hands, feet, limbs, and entire structure. Then having so far illustrated our subject and drawn upon facts which cannot be controverted, we must hence infer in the sequence that the wide form of construction is the true indicator of Physical Strength. Roughness of face is also an index of the same in men and animals. The laws of nature are general and uncontrovertible, and as surely apply to the universe of forms, whether we comprehend them or not.



PHYSICAL LABOUR.

Having long observed that some races of men, as well as many classes of people, are naturally and constitutionally averse to physical labour, I have been led to observe closely the facial and bodily signs that indicate a love of corporeal exertion.

The anti-industrial central point of the world is Arabia; for, on every side, branching out to the east and west, we find industry making progress, while, in Arabia, centuries pass away without any improvement, save what has been introduced, almost by compulsion, by foreigners. The trade carried on by exports of coffee, dates, figs, spices, and drugs, though still considerable, is said to be only a shadow of the old commerce which existed before the circumnavigation of Africa, or when Aden was in its prime, and the Red Sea was the great commercial route. Arabia has few manufactures, but carries on a transit trade in foreign fabrics, besides importing these, to some extent, for its own necessities. Few nations have approached so near as the Arabs to the condition of standing still in a moral, social, and industrial point of view. Considering how little progress has been made, it is remarkable that a greater degeneracy has not taken place.

The southern slave owners of North America were very much addicted to indulge in listless idleness and give way to their love of repose. They disliked toil to such an extent that they used every available means to avoid it if possible.

The North American Indians are naturally averse to drudgery, and evince energy only in their predaceous pursuits. This is indicated by their wide cheekbones, which are connected with the respiratory air passages, and evince, by their largeness, that the lungs also are large, and give vigour for the development of predaceous energy.

In Scotland especially, as well as in the north of England, and Ulster in Ireland, in Prussia, in the State of Ohio in America, as well as among northerners generally, we find a love of physical labour and active performance of duty energetically. The ostensible signs of these tendencies and qualities are manifest in the prominent bones and well defined and developed muscles over the entire corporeal frame. When we find large hands without an abundance of adipose tissue, and a bony face with a muscular expression, we may feel assured that labour is a pleasure to those who are so constituted. The slave owners of America had small hands and small or narrow cheek or malar bones and well-rounded faces, from the bones being small and well-rounded with fat. In their bodies, the muscles were not, as a general fact, so well developed and sinewy as those of the labouring, energetic, industrious men of the north. The climate, in connection with the system of slavery, superinduced among the masters in the south the love of ease, and predisposed them to repose. This indolence and listlessness became heightened by the manners and customs that gradually crept in among them, and developed their sensual propensities to an unhealthy extent, working their moral as well as their physical deterioration.

Two of the most easily observed features of the human face that mark the industriously and laboriously inclined, are a prominent protruding chin in connection with prominent cheek-bones. Observe, also, that labour expands the shoulders and widens the palms of the hands, and thus evinces the practice of physical effort, and this naturally begets a propensity to take pleasure in laborious occupations. Milnes essentially sympathized with this progressive nature when he wrote:—

> "Let us go forth and resolutely dare
> With sweat of brow to toil our little day,
> And if a tear fall on the task of care
> In memory of those spring hours passed away,
> Brush it not by!
> Our hearts to God! to brother men,
> And labour, blessing, prayer, and then to these a sign!"

Kingsley's advice beautifully expresses the sentiment of the earnest worker:—

> "Do what thou dost as if the earth were heaven,
> And that thy last day were the judgment day."

It is a general law in our nature that when any faculty has by cultivation enlarged to a strong degree, it invariably demands scope for exercise in a similar manner to that by which the development was produced. Having struck one blow, we can more readily strike another; and the more we become accustomed to striking, the more natural we feel it to exercise our feracious powers. Thus, in the course of time, it becomes a pleasure instead of a. drudgery. What labouring people consider a pleasure, the idle and indolent call slavery.

Physical labour enlarges and develops various portions of the body. Stooping labour widens the cheek-bones (*mala ossia*), lengthens the under jaw, shortens and enlarges the occipital process, protrudes the lower part of the forehead, and widens the hands, feet, and shoulders. Hence, in accordance with the principles before mentioned, these enlargements are Nature's recorded evidences of the ability and inclination to physical exertion. Examples by thousands may be found among gymnasts, athletes, pugilists, oarsmen, and every class of physical labourers. Those who never labour, never desire to do so; and their narrow faces, thin hands and feet, and contracted shoulders are manifestations of their leisure-loving natures. How the hands and feet will diminish may plainly be seen in all young men who are reared to hard work on a farm, but upon entering a shop, store, or lawyer's office to earn a livelihood, half a score of years will suffice to narrow their structure, and not only make them consider physical toil displeasing, but render their framework as sure a tell-tale of the deterioration as untongued Nature can become in revealing any of her great principles.

Unfortunately for the future of the race, there is a growing aversion to physical labour among the young of both sexes in the present age. This is plainly evinced by the shoulders being much narrower and the forms slimmer than were those of the young of the last century. Look for a moment at the fine physical development of the Germans. Every man of them must learn one of the industrial trades, no matter how high his rank. It is well known that the present Emperor of Germany regularly learned the trade of a carpenter. Then their physique is still further developed by the compulsory army drill that must be undergone by every young man of sound constitution. On the other hand, the girls engage in domestic and outdoor work until their forms take the national characteristic mould of broad shoulders and ample womanly chests.

The lassitude and yawning listlessness incident to idleness can be dispelled by earnest and well-directed exertion in manual dexterity. Whenever you see a young woman faint in a church, one of two epithets may safely be applied to her—lazy or diseased. Parents that are too tender do more to promote sickness and disease than all the world besides. The fond, indulgent mother may be heard saying: "There now, daughter, you sit down and I will do the work." Thus the mother goes on, day after day, toiling and striving with the whole burden of domestic cares, while the idle and selfish daughter, were she properly trained, might relieve her of half her labour, and besides render her own life much more happy by the double pleasure of helping her parent and preparing herself for her own future domestic duties. This is not all; for the daughter acting thus would feel life a pleasure, and ward off the inevitable consequences of sloth and listlessness, disease and a premature grave, over which the epitaph might be written:—"Here lies the victim of idleness, who died of inanition." How wasted looking she became; how narrow and slim her form in every feature.

Young man, accept and lay to heart the advice of experience, and never let your affections settle upon any one until you can find and fancy a good, strong, broad-bodied, well-developed maid, with a countenance full of buxom health and cheerfulness, who can heartily reciprocate your affection. This form of person is by nature and cultivation more happy than a narrow, sharp-faced individual. The very law of industry leads us on to contentment, while its duties give the broad build to the young; and when that form is once attained, it becomes a real pleasure to exert oneself, because it is in true harmony with one's nature. Nothing is distasteful that is in true harmony with one's interior being. How much happier is the agriculturist and manufacturer than the man of leisure who lends money and is constantly fretting his hours away from fear of loss. The servant is more happy than his master, since he labours harder and has less care and anxiety. The laws of our being inexorably demand labour; and, when the normal requirements of nature are heeded, she is no niggard in her rewards of happiness; but when they are ignored, pain and misery attend us. The servant can cheerfully toil while his master demurely and listlessly counts the tedious hours as his life of misery ebbs away.

Then, since labour is a necessity to the well-being of every one, we easily see its importance, and learn that its signs are the effects of effort. Hence the process is easy of tracing up through the effects to the causes, and comprehending why those signs portray the natural disposition. Whatever we have most of, we enjoy its use best. This is the same principle that causes the miser, whose wealth is extensive, to wish for more. La Rochefoucauld truthfully expresses the power of labour to promote happiness:—"Bodily labour alleviates the pains of the mind; and hence arises the happiness of the poor."

Now we glance at some of the ancient peoples who rose to power and eminence by their physical training as well as by their mental capacity, which mainly resulted from the former.

The education of the ancient GREEKS was more of a physical than of a mental kind. The gymnasium was that of the athlete, not that of the *didas'kalos* or preceptor. Young children were, until about their sixth year, trained at home under females, but were then sent to the schools under the charge of private tutors or *pædagogi*. The duty of the pedagogue was rather to keep his wards from outward injury and bad companions, than to teach them the accomplishments of grammar, music, and gymnastics, the favourite studies in those days. The Greeks bestowed more time and attention on the gymnastic training of their youth than on all the other departments put together. There was no such thing as a Greek city of any size or importance which did not boast at least one gymnasium. Athens had three great public gymnasia—the Academia, Lyceum, and Cynosarges, besides numerous private ones on a smaller scale. Solon considered these institutions of so much importance as to draw up a special code of laws for their management. Their administration was entrusted to a gymnasiarch, whose duties were to watch and control the youth, place them under proper teachers, conduct the periodical games and festivals, and pay the athletes whom he trained for them. In Athens the number of gymnasiarchs appears to have been ten. Besides these, there were the officers called *Aliptæ*, or anointers, whose duty it was to prepare the youth for the day's exercise, by anointing them with oil and then sprinkling them with dust. The exercises taught were pretty much the same over the whole of Greece, though they seem to have been carried out with somewhat different views. The Spartans looked upon them as a sort of initiation into the sterner realities of warfare; while the Athenians not only made them subserve this end, but also used them as a means for imparting grace to the action and movement to the limbs. The chief games of the gymnasium were foot-races, jumping, leaping, quoits, wrestling, boxing, dancing, &c., while the younger pupils practised also with balls, tops, and a variety of other games similar to those in vogue among the youth of modern times.

It would occupy too much space to describe with anything like minuteness the Grecian games, which were among them from time immemorial; but we may just state the general facts,—that they were very numerous, and are traceable by tradition back to the earliest periods of Grecian civilization. Indeed, much of the obscurity that rests on their origin is in consequence, and a sign of their high and even mythic antiquity. But we may just mention, that the most celebrated of them were the Olympic, the Pythian, the Nemēan, and the Isthmian games, which were distinguished by the appellation of sacred.

The gymnastic exercises were prescribed in a well-planned systematic series, beginning with the easier, and proceeding to the more difficult. Some of these were specially fitted to give strength, others agility; some educated the hands, others the feet. Among the lighter exercises were reckoned running, leaping, quoiting, and hurling the javelin. When skill had been attained in these, and the consequent strength, then followed a severer course of discipline. The simple course was wrestling and boxing; the compound course consisted of—(1,) The *Pentathlon* (or "five contests"), made up of the union of running, leaping, quoiting, wrestling, and hurling the spear; and, (2,) the *Pankration* (or "general trial of strength"), which consisted of wrestling and boxing.

These games, taken in connection with the early and long training by which they were preceded, and of which they were both the natural result and reward, were a grand educational system, bearing primarily, indeed, in favour of the physical development, but also tending directly and powerfully to advance the intellectual and moral culture. The exercises through which the child, the youth, and the man were, stage by stage, conducted, each in succession becoming difficult and more complex, as the bodily powers came into play and acquired vigour, were admirably adapted to give that union of strength and beauty in which physical perfection consists, and in which the Greeks probably surpassed every other known people.

Solon's high estimate of the paramount importance of these games has been already alluded to; but here we would further state that this estimate is still more strongly perceived in the designation and functions of two other officers appointed under Solon's laws, in the conduct of the gymnasia. The first was the *Kosmetes*, whose name comes from a word (*κόςμος*) signifying "order and beauty," and whose office consisted in the special superintendence of everything fitted to further these high qualities; the other officer was termed *Sophronistes*, and his business was still more intimately conducive to informing the mind, since, as his designation (from *σώφρων*) proves, he was required to guide the pupils to *σωφροσύνη* (*sophrosynē*), a term for which there is no English equivalent, but which may approximately be rendered by "sound-mindedness." The fullest and best information on this interesting and vitally important subject is to be found in Krause's *Die Gymnastik und Agonistik der Hellenen;* and in his *Die Pythien, Nemeen, und Isthmien:* Leipzig, 1841.

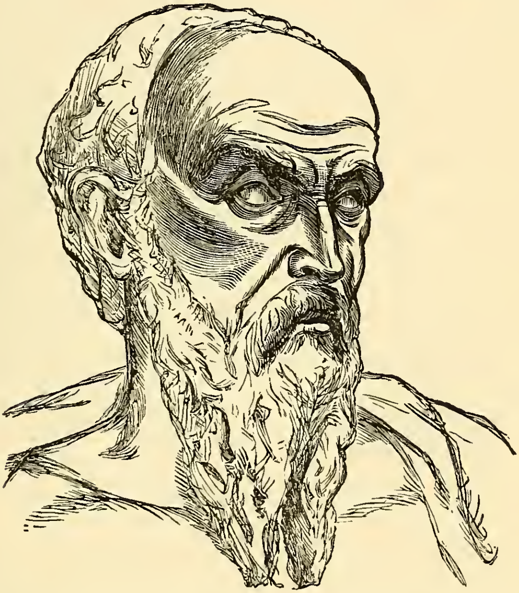
Among the Romans, the amusements of the circus did not materially differ from the Greek *agonēs* or contests celebrated at Olympia, Delphi, and elsewhere, and were certainly of a nobler kind than the frightful gladiatorial fights of the amphitheatres. The Romans, however, became much more brutal in their tastes and public amusements than the Greeks, and at last became almost wholly addicted to gladiatorial and wild-beast combats.

Let it be carefully and earnestly pondered, as one of the most important facts educed from a comparative history of all nations, ancient and modern, that all those peoples who have cultivated the active industrial arts, tending to develop their physical forms and faculties, have risen highest in the scale of civilization, and been freest from poverty, disease, and insanity. It is only a matter of yesterday that Physical Education has been thought of among the English-speaking nations. Having bethought themselves, they have been pondering the wholesome example and practices of some of the celebrated ancient nations, especially the Greeks, and in modern times the Germans. We need only point to the immense superiority of these nationalities over the rest of the world, in social and physical development, to feel assured of carrying conviction to every candid mind as to the enormous advantages accruing from the training of the human frame to active and vigorous industrial habits. Hitherto, Physical Education has been left far too much to nature and chance; and we owe it mainly to the improved condition of medical science that public attention has been called to the deficiency. It includes, *first of all*, the essential conditions of health, such as cleanliness, fresh air, exercise, diet, alternate periods of labour and recreation; *secondly*, the strengthening and proper development of the bodily powers by means of drilling, marching, and gymnastic exercises; *thirdly*, the formation of certain useful habits, which, after a time, become almost instinctive. Hand-writing is a fine example of a habit of this kind, which can be impressed once and forever on the nervous system; the power of rapid performance on musical instruments is another faculty dependent on the same kind of physical training. Easy and graceful deportment, again, is a trained habit; so also is clear and correct verbal articulation. In fact, wherever physical action is required of such a nature that it may be transferred by habit from a voluntary act to a reflex one, there the use of physical education becomes evident; for every good habit which is thus formed and fixed by early training, whether it be a useful accomplishment, or a graceful deportment, or a facility of correct expression, or any kind of musical dexterity, is just so much power actually treasured up in the nervous system, which can be brought forth and applied at any moment, as if it were a kind of animated machinery, and that, too, without any trouble or any sense of fatigue to the possessor. Addison's observation is worth repeating here. He says:—"Manufactures, trade, and agriculture, naturally employ more than nineteen parts of the species in twenty; and as for those who are not obliged to labour, by the condition in which they are born, they are more miserable than the rest of mankind, unless they indulge themselves in that voluntary labour which goes by the name of exercise."

THE EFFECTS OF INDUSTRY ON THE HUMAN FACE.

UNASPIRING and nebulous faces are often met with in society, and more especially among the wealthy. Their expressionless smoothness has never been broken by tornadoes of thought or intense application. Many of the young may be seen who are called beautiful, and those individuals present faces only of the smooth and undefined form, which is the image of their minds. Inaction and idleness of the physical and mental forces bring on roundness of features which are ever unmistakable signs of *nonentity*. They may be compared to a bombshell with burning fuse, round and pretty to behold, but not good company.

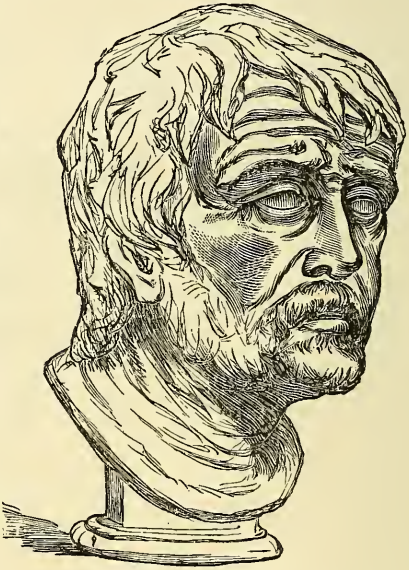
It requires long hours, yea, years, of patient and earnest labour, to acquire facial marks expressive of gigantic thinking power. Nearly all mankind are naturally fond of leisure and enjoyment, and as ease is most generally found amongst the wealthy, so expressionless faces are most commonly seen in that sphere of society. Labour chisels the features into clearness and cheerfulness of expression, whereas idleness will turn the most expressive and beautiful features into listless, sad and undefined, clam-like smoothness. Many boys, when grown, carry faces with expressions of emptiness and *inertia* of mind. They go abroad to earn a living for themselves, and after twenty, or even ten years, return to their friends with faces furrowed by the plough of experience. The deep wrinkles have been cut across the brow—the nose has grown higher on the bridge—the nostrils have opened largely—the chin has become more broad and far-reaching; the lips having learned to keep their own secrets, are firmly compressed; lines like diverging rays of light surround the eyes; the round, full cheek of childhood nestles no longer there, and all is changed from boy to manhood. His face tells no falsehood, as it is God's truth, and he, overflowing with strength and nature's nobility, walks forth the highest type of man, self-made. Others remain boys in mind until forty, or even through a life-time, undeveloped because they shunned the means of accomplishing their highest maturing. Children's faces are often seen on men and women of thirty and forty years of



Diogenes, a cynic philosopher, whose mental industry has rarely, if ever, been equalled.

age. Their lives have been as smooth as glass. The great trials of the world, which are immense furnaces to try the metal of men, have not purified and turned them to steel. The more lead is melted and cooled, the more free from dross it becomes; the more men have touched the antipodes of sorrowing sympathy, or repellant hatred, the less worthless material they contain. Fleshy, round, smooth faces, are significant of ease-loving and inactive minds. An old adage among the ancients was, that a lean and wrinkled face evinced great wisdom. It is true to a great extent, that all original men of great mental labour have carried faces rather spare and well lined.

To think gives an action,—to storm with thought requires great action; the great emotion swings the facial muscles one against another, producing deep wrinkles; and years of wonderful application and mental effort leave deep indentations and well-defined marks on the Physiognomy of man; as active waters of former years have left their deep gullies on the Physiognomy of earth. Physiognomists call these wrinkles on mankind beautiful, as they are recorded evidences of a life of industry and virtue.

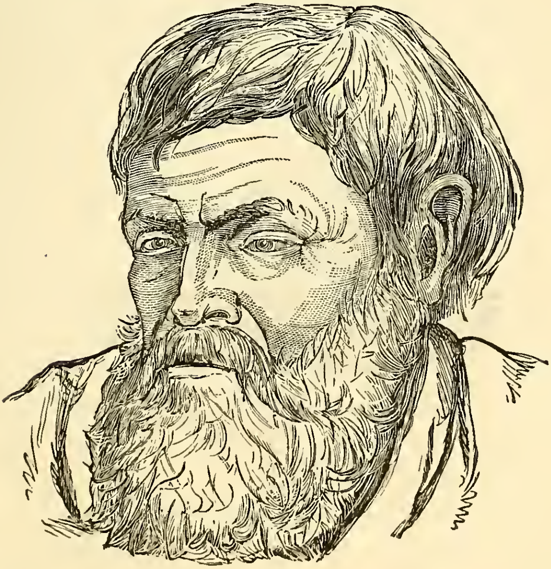


Lucius Annæus Seneca, a celebrated Roman philosopher, with well-defined lines, indicative of years of consecutive mental industry.

In looking over six hundred photographs of noted rogues in the "rogue's gallery" in San Francisco, I observed that they were nearly all wrinkleless, and of round, full, expressionless faces. This peculiarity of features would scientifically testify to an utter, or nearly an entire absence of character. As it takes much character to make a man thoroughly honest, so they have too little to give lines of honesty.

People who live industrious lives are usually most moral, and out of a knowledge of this fact sprang the truthful saying, that "idleness is Satan's workshop."

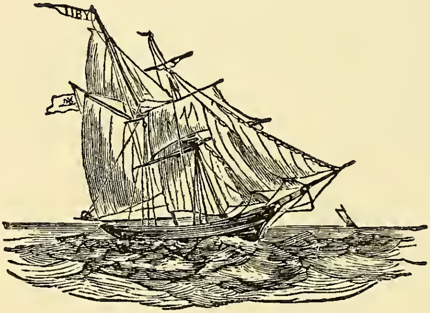
When visiting the penitentiaries of various States, that fact has been made apparent by the records of those several places of punishment, that many of those criminals were formerly loafers, without even a trade by which to earn an honourable living.



A Scotchman, of Edinburgh, a remarkable example of physical industry.

Industry may be compared to the running brook, which is ever pure, or purifying itself; whereas idleness is the stagnant pool retaining all filth, and ever ready to receive more.

There are many men and women who are well-born and amply educated, but who, not being compelled to labour, settle down into characterless nothings, and become cesspools to catch the vices of those who surround them. Earnest, ardent, and interesting labour will develop character, and that character will produce wrinkles. Hence, those who would lead lives of honour and usefulness, shunning vice and crime, let your aim ever be to cast off the scum of idleness which only gathers on still waters, never shading the purity of the dashing stream.



PHYSIOGNOMICAL SIGNS OF PHYSICAL ENDURANCE.

From the Latin word *durus*, hard, we have formed the English terms durable, durability, endure, endurance, because it has been remarked with respect to all substances in nature—animal, vegetable, and mineral—that the more hard they are, that is, the more compactly put together their particles, the more wear and tear they are capable of sustaining. The hardest, and, therefore, most imperishable of all known substances is the diamond; and scientific men reckon nine lesser degrees of hardness among minerals down to talc, which is the softest. Any of these, however, are harder than vegetable substances; among which the oak, ash, elm, chestnut, walnut, beech, birch, &c., called hard woods, have been proved to bear much more wear and tear than those denominated soft woods. Among animals, we find those to be the most hardy that have the least soft material, and the most hard in their composition—fat being the softest, the muscle much harder, and the bones hardest of all. Fat (adipose) is a reservoir of nourishment in case of long fasting or sickness, and is conspicuous in the hump of the camel; but it gives no power of enduring labour and fatigue. Horses are not considered fit for the race-course if they are at all in an adipose condition; and those of Sahara, never much troubled with this quality, are still further reduced before joining an ostrich hunt; which is the severest ordeal to which they are subject. So it is the lean hound, and not the fat dog, that is chosen to pursue the game, not merely on the ground of his swiftness, but his power of continued exertion. In the human race, we find that very fat persons are naturally puffed and out of breath after the least unusual exertion; also that they never attain to old age, and are very liable to apoplexy; whereas those that endure well the toils of an industrious life, and become examples of extreme longevity, are persons of what is called a moderate habit of body.

Bones being the hardest of all the materials entering into the constitution of the human body, we naturally expect, and find it so in fact, that the larger these are, the greater the power of physical endurance. A man may not be tall, yet have broad, heavy bones; or he may be tall, and have large bones in proportion to the size of muscle. Such a one will be capable of greater exertion and will endure more fatigue than one whose bones and muscles are more equally developed; because the bones, being harder than the muscles, are the more enduring substance. People thus constituted may not live so long as those of the rounder, life-giving form; but they will more easily sustain a hard day's march, fatiguing labour, prolonged fasting, or mental grief, than those of any other build. Such men exhibit well-marked outlines in their features; the face somewhat hard and angular; the nose always prominent; the eye-bones sharp and jutting out like the over-hanging cliffs of a waterfall.

The camel (*C. Bactrianus*) is capable of more endurance than any other of the quadrupeds employed by man. How his bones stand out! how large are his joints! What an uncouth looking animal altogether! He can traverse the burning sands of the desert day after day without tasting food or refreshing himself with drink; and this with a burden of perhaps a thousand pounds weight; performing a journey of hundreds of miles at the rate of two and one-half miles an hour.

Less unsightly than the camel, but more bony and homely-looking than the horse (*E. Caballus*), is the ass (*E. Asinus*), and much more patient of continued fatigue.

So we find homely, bony faces in mankind to be evidences of great power of endurance, both as to body and mind. Abraham Lincoln was a remarkable example of this configuration. He is said to have gone through the severest agricultural labour in early life, and to have gained the soubriquet of the railsplitter, by performing the feat of splitting 3000 rails in one day. In his after career, he was pre-eminently distinguished for fortitude in suffering, as well as activity and perseverance in doing whatever fell to his lot.

The persistent exertion which Weston, the pedestrian, requires to use in order to walk a hundred and twelve miles in twenty-four hours, is rarely if ever equalled. His walk of four hundred miles in five days, which he accomplished, as he did the other of a hundred and twelve in twenty-four hours, is sufficient proof of his powers of endurance. His face and figure is at once skin and bony. The slightness affords him activity, the osteogeny insures the power of continuance. Andrew Jackson was another man formed to endure hardship, as was evinced in the osteous structure of his frame. When but thirteen years of age he fought under Sumter, and continued in the army until the end of the war of independence. At a later period, when the Creek Indians broke out in hostilities, he raised a volunteer force of two or three thousand men to defeat them, and, when provisions failed, set his men an example of endurance by feeding on hickory nuts, whence the soubriquet of Old Hickory. His political life was marked by a steady and powerful resistance of all opposition, and his presidency by singular firmness in carrying out whatever his judgment approved. Wellington is known to have rode the little horse Copenhagen for seventeen consecutive hours on the field of Waterloo, and to have declared he was as spirited and fresh as the animal, which kicked up on his dismounting. This celebrated general was rather of small stature, but bony, well-muscled, and so hardy that he received the soubriquet of "the Iron Duke."

He, therefore, that would live long, and be capable of doing much while he lives, should avoid all that self-indulgence which brings on the heavy, soft, adipose conformation. He may not be able to render his bones large and prominent; but he may generally avoid overloading himself with fat, and losing his manly energies in habits of luxurious ease and self-indulgence.

MARKS OF LONGEVITY.

At the forty-third annual meeting of the British Association for the Advancement of Science, held in Edinburgh during the month of August, 1871, the subject of Longevity was touched upon, though very sparingly discussed. The speakers—according to a not uncommon practice among our modern so-called scientific teachers — confined themselves chiefly to facts for the most part such as could be culled from the daily newspapers, avoiding, as if with intent, the trouble of ascertaining the principles or reasons on which the inducted facts were based. They were loud as to results, but the "why" of the results—the only thing one would imagine with which men of science, as such, have to do—does not seem to have occupied even a moiety of their attention. They made certain statements relative to effects which had come directly or indirectly under their own notice, but left the causes on which the effects depended for their existence nearly or completely untouched. It is as if they had gravely stated that a stone thrown up into the air was sure to come down again, without making reference to that law by which the earth attracts to its centre bodies within a certain radius which are lighter than itself; or as if they had solemnly averred that the hardy lichen was the only plant which could thrive at the height of 18,225 feet above the level of the ocean, without referring to those peculiarities in the lichen which account for its growth in a region where other plants would wither and die. It is not enough for scientific purposes, or for practical purposes, to tell us that certain men lived to an extremely old age; for such a statement, unsupported by the results of philosophical research, is only calculated to make those whose friends do not reach a long term of years, dissatisfied with their circumstances and ungrateful to nature. What kind of build had these long-lived men? What was the nature of the food they took into their systems? What were their general and particular habits? How were they treated when they were young? And may other men, by using the same food, and accustoming themselves to the same habits, avoid a middle age or early death and live to the same age? These, and other questions lying on the same plane of things, we would expect to have answered when the subject is broached by scientific professors, and not the bald statement, which must be as evident to any newspaper-reading schoolboy as to the most philosophic among philosophers, that certain men have reached an uncommonly great age before giving up the ghost.

It was stated by Mr. ———, in a paper which he read before the above Association, that he had observed "a sort of silvery expression, with apparently great toughness of the skin, which he deemed an essential peculiarity in persons over ninety," and these marks were given as Physiognomical signs of Longevity. So far so good. But what is it that produces this "silvery expression," and what is the cause of the "toughness of skin" observed in people over ninety years of age? These are the problems which Mr. ——— ought to have solved, but which he coolly ignored. It is true he mentioned that the old people referred to did not use tobacco; but did he attribute the Physiognomical signs of which he had spoken to this fact? Nay, he did not so much as think it worthy of being suggested that tobacco was injurious to the human system, and must, as a necessary consequence, do much in the way of shortening life. Nor did he make the slightest allusion to the nature of the food on which the individuals to whom he referred had subsisted, neither did he consider it within his province to refer to the tough-skinned people's general habits. Thus we see men climbing the wall of science, or at least pretending to do so, while they are living in the grossest ignorance of the material of which that wall is constructed, and the kind of foundation on which it is based.

To sustain life to an old age requires in man or animal strong vital powers, in order that the system in all its parts may be furnished with a sufficient quantity of healthy blood; for without a sufficiency of healthy blood there can be no harmonious, healthy action of the faculties, and where this healthy action of the faculties does not take place, that physical strength which is necessary for long endurance cannot possibly exist. When a lamp goes out, it is because it lacks combustible substance, viz, oil; and so it is with the lamp of life. When a man dies a natural death, the proximate cause of his death is a want of healthy blood which constitutes the *substratum* of human life. So long as the body is supplied with good blood, so long does "the lamp hold on to burn;" but once this ceases, life dies out, "the lamp" has lost its combustible substance, and can "burn" no longer. Now, this being settled, the question naturally comes up, "Where do we get good blood, and of what is it made?" We answer, good blood is made of good food, such as nature has provided for us, heartily eaten, and properly digested. He who has a capacious stomach, healthy digestive organs, and a good appetite, possesses most unquestionably the fundamental essentials of a long life. Experiments have often been made, both on men and animals, and in every instance it has been found that long-lived persons have large stomachs. But, then, this organ can be damaged. Indeed there are few diseases whose beginnings cannot be traced to a deranged stomach. Tobacco, strong tea, strong coffee, spirituous liquors, unwholesome confectionaries, and luxuries of almost every description, invariably derange the stomach and weaken digestion; and whatever does this must inevitably shorten life. Roundness of body and largeness of mouth are always signs of a roomy stomach, and are thus, according to the principles laid down, physiognomical signs of longevity. So is it in plant life. The small lichen which can grow and vegetate on a higher altitude than any other plant, is round in form and vigorous, having large absorbing as well as circulatory powers. It has strong life-producing organs, and on account of its inherent vitality, can endure the cold and sustain itself in places where plants not so round in form would wither and perish in a few hours. The same thing is true of animals. Elephants are of a round construction, with large mouths, large stomachs, and are noble eaters; and it is admitted by all naturalists who know anything of history, that these animals have been known to live as long as 240 years. The round carp, or gold-fish, according to the testimony of Buffon, lives to an enormous age. He mentions two which he himself had seen, one of which was 150 and the other 200 years of age, and pike have been known to live even longer than that; while the tortoise, remarkable for its roundness, with excellent digestive organs, sometimes sustains life during four full centuries. Birds, too, are very round and able to digest well—even pebbles, nails, and glass being no obstruction; and we are assured by naturalists that there have been instances of swans living over 300 years.

Now, when we look at those animals which are slim or flat in form, we find the very opposite to be true. Their stomachs are not capacious, thus rendering digestion less enduring, so that, comparatively speaking, they die at an early age. The common rabbit is long, thin, and flat, and rarely lives beyond ten years. The giraffe is peculiarly tall and slim of build, and seldom reaches the age of twenty. The ox and the horse rarely manage to live thirty years, especially those which are domesticated. Their natural habits are changed, and by a forced manner of feeding, their digestive organs become extremely weak, so that they are not unfrequently considered old at twenty. Prolonged life is dependent upon natural law, and where natural law is violated, premature death cannot but ensue. We have met with several men who were over 100 years of age; these were in various parts of the world, and in every instance they were of medium height, had large mouths, were round in form, with good healthy digestive organs, attributable to plain living when they were young. The persons of whom we speak were also very temperate in their habits. They neither smoked nor chewed tobacco; they were thus saved from throwing off their saliva and weakening their stomachs. Only one of them used coffee, and he only once per day. They all partook of tea, but it was of the weakest kind. Confectionaries they avoided, and when they were younger had lived much in the open air. They wore comfortable, strong clothing, and in quantities sufficient to protect them from cold, while they took in enough of pure oxygen. They were not fleshy, though of round build, and their bones had been strengthened by industry, and the character of their food. In none of them was there the slightest appearance of that species of tumor containing pap or plaster-like matter. They were not atheromatous: such symptoms being found only where the digestive organs are not good, and in consequence the blood is much impaired. Their hearts were free from fat, their lungs strong and healthy, and their external senses were good, with the exception of two persons who were a little deaf, and all these ever-to-be-envied bodily conditions were the natural effects of a powerful nutritious system. One coloured man who lived in Ohio, and was 113 years of age, had all the special senses in perfect order, and his well-balanced judgment we have scarcely seen equalled among men of forty. Nor was there one of all the centenarians, which it has been our good fortune to see, who manifested the slightest degree of dissatisfaction relative either to their age or circumstances. Indeed, a halo of commendable resignation seemed to surround every one of them, and to this resignation, or rather intelligent contentment, they were much indebted for their long life, as nothing is more conducive to healthy digestion, regularity of bodily secretions, and good blood, than this very rare mental quality. Owing to their temperate and industrious habits, the nervous system was never deranged; and this being the case, the brain and nerve form was preserved intact—the importance of which it is impossible to over-estimate. We may also add that they were all married, or had been, which contributed not a little to their "length of days;" for while matrimony improper leads to ill-health and premature death, matrimony, as nature would have it, ever tends to longevity. Thomas Parr, who died at the advanced age of 152 years, was examined by Harvey, to whom the world is indebted for at least one important Physiological discovery, and according to Harvey's account, Parr's bodily organs were in such excellent order that, but for the fact that he was taken to London to visit Charles I. and his Court, and was prevailed upon to indulge largely in cake, wine, and other luxuries, he might have lived fifty years longer. These things, however, being wholly unsuitable for his system, deranged so materially and rapidly his digestive organs, that he died before he had time to return home. Of this remarkable man Taylor wrote the following brief description:—

> "His limbs their strength have left,
> His teeth all gone (but one) his sight bereft,
> His sinews shrunk, his blood most chill and cold—
> Small solace; imperfections manifold
> Yet still his sp'rits possess his mortal trunk;
> Nor are his senses in his ruins shrunk,
> But that his hearing's quick, *his stomach good,*
> He'll feed well, sleep well, well digest his food.
> He will speak heartily, laugh, and be merry;
> Drink ale, and now and then a cup of cherry,
> Loves company, and understanding talk,
> And on both sides, held up, will sometimes walk;
> And though old age his face with wrinkles fill,
> He hath been handsome, and is comely still;
> Well-faced, and though his beard not oft corrected,
> Yet neat it grows, not like a beard neglected."

The portrait of Parr which is given on page 180, and which we feel assured our readers will be interested to see, is from a likeness by Reubens. It was painted when Parr was 140 years of age, twelve years before he died.

The conclusion to which we have come, then, not only from personal observation, but from the testimony of others who have made experiments, is, that roundness of form and largeness of stomach, indicated by a corresponding capaciousness of mouth, are unmistakable Physiognomical signs of long life; because where these are we find as a natural consequence healthy digestion and strong assimilative powers, all of which keep the human system in good repair, and are absolutely necessary to longevity. And here we may give without comment a rule to determine longevity, which has been popular among German doctors for more than two hundred years.

An imaginary or real line can be run from the lower portion of the superciliary ridge to the occipital point or protuberance; if this line runs high above the opening of the ear the life force is strong, if running near or over the opening of the ear the life force is weak or very weak.

It may be objected by half-informed religionists that a desire for long life is in direct opposition to that plain statement in the sacred Scriptures, which speaks of seventy years as the term of human life; but to this we have to reply that we have never been able to accept that statement as unconditional. The foolishness of man was no doubt apparent to the author of the statement, and, so far as we can judge, he merely meant to say that the habits of men, chiefly evil, stood in the way of long life, and that so long as these habits were unchanged, generally speaking, seventy years would end their sublunary days; but let the habits of men be changed; let their bodies be attended to from childhood upwards as they ought to be attended to; let all narcotics, whether of a solid or liquid nature, be strenuously kept out of the system; thus let the digestive organs get, what we call in common *parlance*, "fair play," and what is there in the words of Israel's poet to hinder any man from living twice seventy years? Men should fall into the arms of death as they fall into the arms of sleep; but the evil is that men die before they are ripe for it. They go down to the grave before their time. There are two ways of committing suicide—suddenly and gradually—and we have no hesitation in saying that thousands of our fellow-men, unconsciously and unintentionally, of course, practise the latter daily—and thus, instead of hanging, so to speak, on the tree of life until such time as they are ripe, and could drop off decently, like luscious pears from their branches, they, by a horrible system of unintended self-murder, gradually lay upon themselves unholy hands, and die not decently, but the very reverse.

ONE-SIDED PEOPLE.

The subject of one-sided people affords a wide field for thought and expression; for comparison, conception, and reform; and we hardly know how to preface a subject so prolific with the excesses of natural and forced deformity. But we can conceive of no enterprise so grand, no means so noble, no undertaking so philanthropic, as that which has for its end the elevation of common humanity. It is too true that the idiosyncracies of our natures sometimes seem to preclude the entire possibility of our exercising the charity we should toward the shortcomings of our fellow-men. We forget we too are weak and dependent upon others for our own success and progress in the arts and sciences, and every scale of educational refinement; and in reasoning by the analogies we would present, we find we are deficient in the noble charities of thought and sentiment toward our *one-sided* neighbours, consequently we may not be judged by our own criticisms.

We are much inclined to forget that we too are mortal. And as we raise our standard, which would make our fellow-men perfect men and women, we too often forget, that upon *our* faces and upon our physical and physiological developments and mental acquirements, are stamped the characters we represent, and we are as a walking monument; the whole man stands out as an open book, and he who runs may read.

Could we know ourselves, and see ourselves as we are seen, methinks that a spirit of reform would be going on in every nature, and we would strive to cast the beam from our own eye, that we might the more easily discern the mote in our neighbour's eye.

Nature has done much to deform us, and we are suffering from the sins of our fathers from the generations past; while neglect does not make us any better—does not apply the healing art—does not come with an imperative demand upon us that we exercise all our own *moral agency*, that we might make use of all within our powers, and be careful to avoid many of the excesses of life, that we might present ourselves less faulty before our fellow-men.

Which of us shall say, I am without spot or blemish devoid of all deformities, assuming the title of nobility belonging only to the perfect man? While ignorant mothers and careless nurses dandle children in such excruciating attitudes, is it any wonder that they are deformed in person (scarce half made up), crooked in all the traits of manhood, one-sided in actions and dealings with fellow-men, and all the result of ignorant nursery treatment.

We will notice some of the imperfections, their causes and tendencies. Not one person in a thousand is in perfect form, from some cause, direct or indirect, moulding us to honour or dishonour—stamping the signet upon our mental, moral, and physical natures. Our cruel nurses commence to torment us by holding us too long on one arm, and keep us lying too much on one side; this has a tendency to deform us. Holding our heads too low, too much blood comes to the brain; the bones and skull are soft at this tender period, they are easily put out of shape. The brain settles on one side of the head, the form is twisted to one side, and the features are drawn out of shape.

As the result of ill-treatment, we trace imperfections and deformities in our fellow-men. Some we see with one lung better developed than the other, one shoulder higher than the other, one corner of the mouth higher than the other and drawn aside, one eye-brow arched higher than the other; the eyes are not horizontal and one is partly closed, the nose is not in a straight line with the face. We also notice the beard to grow heavier on one side of the face than the other, as the result of lying too much on one side while sleeping; it hinders the circulation of the blood, thus diminishing the activity and energy of that side, making many subjects for paralysis, heart disease, and very many ailments to which flesh is heir. This should not be practised, everybody should change sides every night; we used to change our old-fashioned round-toed shoes every morning to make them wear longer; so people will wear longer who change sides in sleeping. Those husbands who insist upon having their wives sleep on the back side of the bed, and are never willing to take it themselves and let their wives come to the front, are making both their wives and themselves one-sided, when turn about each night would equalize the affair, and be a sure correction of the evil which too often prevails.

A well-balanced body and brain are indispensably necessary to a well-balanced mind, and a violation of any law of nature criminates us; we stand as culprits at the great tribunal of our conscience, to answer for the mental, moral, and physical sufferings. It is well known that any violation of the laws of nature makes one-*sided people,* and one-*sidedness* tends to insanity, so the majority of persons with whom we mingle from day to day are partially insane.

It is related of Dr. Wigham, who attended the grave of Queen Charlotte, that he said he had seen her buried before;

he never had, for she was buried only once. One side of *his* brain was larger than the other, he took two impressions of the burial, the larger half of his organization taking the impression first, and the lesser instantly after, which is double consciousness. One form of insanity after another comes up before us, asking our forbearance, imploring our aid.

These questions, like deep-seated tumours, require the delicate and artistic touch of a skilful surgery, or else their life is surely imperilled. There is no place for quackery here, "the diagnosis" is beyond the ken of pretentious charlatanism.

We have to deal with mind and character; minds as varying as the changing colours of the chameleon, and characters which need the polish of true society, and all its educational refinements which their capacity will hold; yet in spite of our endeavours to educate and refine, the cloven foot will present itself.

The dignity of man and his superior qualities, his nobility, and his sovereignty, has been from time immemorial the orator's theme and the poet's song, and yet his overbearing nature and one-sided propensities have been touched upon very lightly. He loves money, and grinds the faces and pulls out the very heart-strings of the operative and employee.

Oh! with what conscience can such a man enjoy the wealth wrung from the finger-ends of the seamstress, as in the gloomy attic, by the midnight candle, she wastes her life, strains her eyes and heartstrings to earn a miserable pittance that just suffices to keep the life-pulse beating; and yet these parvenues claim respectability.

With peacock pride they spread their ostentatious plummage, flaunt their snobbery, and parade their ginger-bread aristocracy in the faces of honest men. Ah! and "with devout visage and pious act" pharisaically take the name of the Saviour upon their lips. And what a miserably one-sided man is the miser!

"Proud fame's a stranger to his blinded eyes,
He ne'er has seen her gilded dome arise;
Oh no! poor man, loth to release his hold,
Sees nothing, knows no God—but gold.

"While to his base desire he serves as slave;
Ambition's summit is to him to crave
A glittering dust, and with outstretched hand
Grasps in the shining particles of sand.

"He weeps, he starts, he fancies footsteps near,
And grasping with both hands his treasures dear;
He hears them coming, hears them whisper low!
His fancies wild tell him—'They'll rob me now.'

"One foot advanced—one hand above his head,
He invokes the pious blessings of the dead;
Calls on his God but surely knows not why—
He knows no God but gold—he fears to die.

"Repulsive, cold, he'd friendship's rights disclaim,
And Charity he spurns from him, 'poor dame;'
Refusing aught, whoe'er the stranger be,
Lest Heaven should smile and *bless* his charity."

How grand are the works of creation! what a vast field for thought and speculation to the thinking mind. The *Great Mind* has created all things for us, and given us minds to appreciate them, and souls to love them; it has adorned the heavens with stars, and carpeted the earth with flowers; it has strewn all along our pathway ten thousand blessings and evidences of our immortality. Who has not felt the force of the fable, that when man asked Jove to give him evidence of his immortality, Jove gave him "Music." And who can doubt? Who that delights in song, and has stood with wonder-stricken awe, in the spacious corridor of the Cathedral of St. Isaac at St. Petersburg, St. Peter's at Rome, or St. Paul's in London,—how have we listened to the organ's plaintive strains rising higher and higher, until music sweet filled each vaulted niche, then to the ear again; then higher, still higher rise the pealing tones of thunder, giving expression to the symphony, then bursting forth in all the strains of harmony, loud, long, exultingly. Our minds thus reach up to Jehovah, and we are touched by the breath of inspiration. Who shall then deny our immortality, or limit our progression in this world or the world to come?

If our minds are not poisoned with "*one-sided theology*," we can admit that the laws of progress were not formed for this world alone, that the mind of a *Newton*, and the mind of a child shall not remain the same for ever, but the end shall be as the beginning was—God and progress.

Say not that the soul perishes at the portal of the tomb, but reason with your one-sided minds until you say we shall with angel architects and artists arrange and re-arrange castle after castle, where science, skill, and mind, and art are required to draw the lines of beauty and make almost tangible all the fairy castles made in our faith for future occupancy.

The last, and the very meanest thing in all the *one-sided* category, is the "Politician," the aspirant for *fame;* he is ushered into the political arena, they laud and fondle him at the nominating caucus; *he has money* (it does not matter how he got it), he responds nobly,—(says, he can't make much of a speech), but here, "take these greenbacks, and do the best you can for me."—Thank you. They are

"Eloquent in song, and to nature true."

He has more of the "dust which fools adore and call a God" than brains, so of course he is elected to the high and honourable position of legislator or senator.

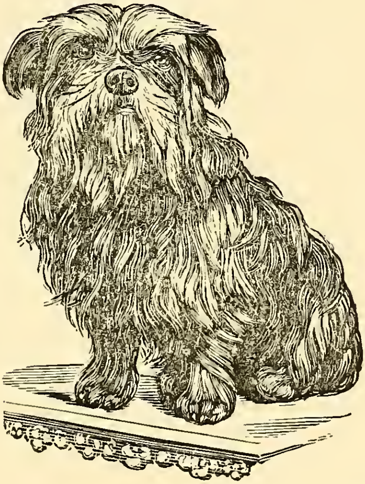
He boasts that his seat cost him over fifty thousand dollars, and he carries the votes of about four members in his pantaloons pocket. If he has talents, he can spread himself like a green bay tree for a season; but he is likely to be nipped by the first frost of the coming autumn; he can boast if he chooses of the *Honourable* title he bears, that his aspirations are gratified, his presumption more than realized; but his fame is not lasting, it is not worth the price he paid for it; he was elected by his "one-sided" constituents, and they still continue to be one-sided towards him (on the side he carries his money), and he, to carry on the joke in retaliation, having succeeded in attaining his high position of honour, has no more use for his constituents, and of course takes the other side of the street, and they call him one-sided for trying to avoid the crowd.

Men generally would rather aspire to honour, and make money, than cultivate their minds. Mammon is the *one-sided* god of this world, and the world will love its own. The rich man is to be pitied rather than envied, if he has nothing but his money. Homer, it is true, was a beggar, and Milton sold his *Paradise Lost* for five pounds sterling, and yet what Croesus has such immortal honours as they?

Let us cultivate our minds, try and get the warp all out of them. Let us learn to think for ourselves, act and reason for ourselves. Let us feed the inner life with heavenly manna, and bask in the sunlight of our well-cultured intelligence. "Knowledge is power," and is never lost; every idea we gain here, every talent we improve, will set us ahead in the spiritual life, where angels will be our teachers. It is an indispensable doctrine of the Scriptures, that the allotment of the ransomed shall be in proportion to their attainments here.

We are candidates for a prize, wrestlers for a diadem. Life is a compound of the material and spiritual, by virtue of necessity. To most men it is largely material, but little spiritual. The spiritual is not sufficiently cultivated. The life to come will be a spiritual life, and if we cultivate the mind, the spiritual here, and in proportion as we cultivate it, we shall be prepared for the great hereafter. Let us avoid being *one-sided* at all times; let us learn to be philosophers, and

"Do good, let those who will be clever
Do noble things, not dream them all day long,
And make life, death, and the vast for ever
One grand sweet song."



"Greyfriar's Bobby." A remarkable dog, that guarded his master's grave with unswerving fidelity for upwards of thirteen years, in Edinburgh, Scotland.

PROGRESS IN ANIMAL AND VEGETABLE LIFE.

Animals which produce young of precisely the same form and colour as the parents, will be found to continue on the same plane of life as their progenitors; while animals which produce young differing in colour from the parents, are capable, by the laws of nature, of improving in body and intelligence. Those animals which had their origin in Circassia are progressive, and their varied colour in the same species is evidence that they can change; and progression requires, as it implies change.

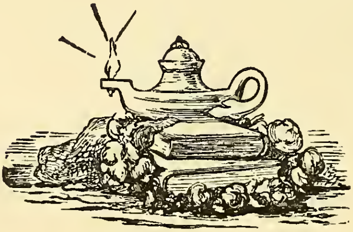
The common apple has ever been found where the white race live, and each flourishes equally in temperate climates, having had their origin in the same atmosphere where the soil, and heat, and cold have the same influence; so, having sprung from the same causes, their effects cannot vary. Hence what effects one favourably, must of necessity generously improve the other.

Of all fruits none is so commonly cultivated by the white race as the apple. It has amongst fruits the earliest, widest, and most interesting history. According to all accounts, either sacred or profane, this hardy fruit appeared about the same time as the white or varied race, and has been carried with them in their migrations to the remotest latitudes of the globe. Theophrastus classed it amongst the more civilized fruits (*urbaniores*); Tacitus described it as the favourite fruit of the ancient Germans. A shrivelled apple was obtained from one of the lake dwellings of Switzerland. Ulysses and Solomon praise its juices; Tantalus grasps anxiously for it in Hades; Iduna keeps in a box apples which the gods, when they feel old age approaching, have only to taste to become young again. The legends of all ages, since the white race began, have recorded evidence of the existing apple. The mythology of the temperate climates often refer to this fruit. Thus, from what can be gathered from history, we may conclude that this fruit has been transplanted to, and flourished in, all the localities and climates where the white race has made a pleasant home. This fruit rarely produces from the seeds the same colour, taste, flavour, and shape as the parent stock. In this principle the apple is precisely like the ox, horse, dog, goat, cat and other domestic animals, all of which originated in the same climate, and about the same time where and when man's origin is dated.

The dog has been largely improved under the intelligent management of man. The horse never could shew more fine points of make, or trot a mile in less time than during the past year. The high rate of speed attained by this animal is attributed by horsemen to the improving effects of breeding. The ox has risen to a high state of domestic usefulness under the influences of man's observation and guidance. So we could say of all the animals living with the Caucasian race in a domestic state. But the signs of improvement are what we are seeking. These can be based on the great principle inherent in the white race of mankind. Wherever the children or offspring follow undeviatingly the colour of their parentage, we may rest assured that nature has made only one channel or groove in which that species is to run; and what nature designed to be, no man can long thwart. Nature has fixed her seals on all her wonderful works, and they can properly be understood only by the student of nature.

Where nature has allowed a departure, and even provided for a variety in colour, which is only the significant banner of the inherent laws which govern and regulate animal life; there man can, by studying the governing principles, so apply them that more variety and an improved condition can be produced, which will be vastly superior to the foregone generations of that species.

This law applies with equal force to apples, peaches, pears, and all fruits where the seedling varies in colour, flavour, and size from the parent stock; for any law in nature is just as true to her banner or outward signs in the vegetable as in the animal kingdom.



ACTIVITY.

As nature never made a face for physiognomical purposes alone, so also she has not formed a body of special shape to indicate simply its peculiar adaptations. The primary intention of nature would seem to be necessity. None would be so stupid as to claim that it was necessary an animal should be of long, slim form, simply that man might be able to tell what its capacities were. Necessity is a higher law in the designs of nature than pleasure. It is true it might afford to many a pleasure to be able to discern all the peculiarities of an animal by its outward form. But nature, in her great beneficence, is true to her own needs first, and thus begins with charity at home.

If we were to make an engine roll over a railroad track at the speed of sixty miles per hour, we would construct it on the light, slim principle. The driving wheels should be large in circumference, piston-rods having a long stroke, and light and slim rather than thick. If we wished an engine to run twenty miles per hour, and pull a long freight train of immense weight, we would form it on an entirely different plan from the swift-running but weaker engine. The plan for strength is breadth and heft. The wheels should be low. The piston-stroke short, and thickness and heft should enter into its design very largely.

Now, nature acts with more wisdom than man—never less; therefore, when she wishes an animal for great action and less strength, she builds the legs long and slim, the body is long and narrow, the tail, alike with the head, is long and thin also, and when all parts are thus formed, the muscles, having great length of body in which to contract, give quick pulling upon the tendons, they acting quickly upon the slim, light bones, move them rapidly, and agility is the result. Thus can we discover that the great law of proportion in animals is true as in mechanics; that proportionately as motion is increased action is diminished. Hence, by no difficult process of reasoning, we arrive at the conclusion, that animals constructed on the broad plan, like the lion, tiger, gorilla, crocodile, and elephant are strong; while we as effectually learn that animals of the long, narrow build, are agile. Man, being subject to these same natural laws as animals are, when constructed on the same plan, will possess the identical qualities and powers; therefore we at once and for all decide that a man of tall, slim, or short, slim build, is naturally brisk and sprightly of motion. We just as soundly decide that a man who is five feet high, and weighs two hundred and fifty pounds will generally move slowly. As an example, take Weston, the rapid walker of America, who walked one hundred and twelve miles in less than twenty-four consecutive hours, and four hundred miles in five succeeding days. He is a slim, tall man.

General Washington was built on the tall, slim plan, and history records it as a fact that he was an excellent runner, and could jump twenty-two feet at a single bound.

General Sherman is tall and slim, and no more industrious and quick-motioned man entered the American army during the late rebellion.

The proofs of this truth in Physiognomy are in nearly every household in America. Take that lubberly, round, stout, and short boy, and see his slow movements, and how he loves his ease, while that tiny, light, slim, little girl is all vivacity and sprightliness.

The most active animal of the domestic circle is the greyhound, and how slim his legs, long his tail, gaunt his body, outstretched his neck, and pointed and far-reaching his nose.

The best Physiognomical sign of quickness is a long and pointed nose. Animals and men with long, thin-pointed noses are formed on the active, slim plan in every department of their natures and bodily build.

There is less action in animals that hybernate than is found among most others. The black bear is a hybernating animal, and is characterized for strength and the destructive qualities attending the broad build more than for nimbleness. The marmot (*Arctomys Marmotta*) enters into the lethargic hybernating state about the middle of September, and does not emerge from it until sometime about the beginning of April. The marmot is of thick and clumsy form, very strong and not very active.

The urson has a short nose and moves slowly.

The kaolo, or Australian bear (*Phascolarctos cinereus*), uses great deliberation in climbing a tree. The toes and feet of the animal are well adapted for the slow, but sure mode in which he progresses among the branches of a tree, and are less useful when making his slow terrestrial progress. His nose is exceedingly short.

The animal most known among African hunters, as possessed of marvellous speed, is the gazelle (*Gazella Dorcas*) and the *Gazella Ariel*. Their whole make-up is remarkably slim, thin, and in a manner adapted to rapid change of position.

In contrast to the last-mentioned animal, we would call attention to the sloth (*Bradypus tridactylus*), a tardigrade edentate mammal of the genus Bradypus. The name indicates the peculiar characterizing trait of the animal, as sluggishness and laziness are its natural birthright, for no living animal is equally inert and torpid. The whole form is short, broad, strong, and consequently of a lumpish and exanimate disposition. The existing species of sloth is arboreal; but many of the extinct kinds were huge terrestrial animals.

The wombat (*Phascolomys ursinus*) has a very heavy body and short legs, and in its gait has a rolling waddle much resembling the lurching of a sailing vessel when in a storm. The muzzle is quite broad and thick. It is an apathetic animal.

The coati, or Coati Alondi (*Narua Ruia*), has a nose and head much resembling that of the Persian greyhound, and no animal can ascend or descend a tree in less than twice the time it requires to do so. It being a nocturnal animal, its agility and rapidity of movement is only seen as the shades of evening descend or at the dawn of morning.

The chaeropus (*Chaeropus constanotis*) has also a very long and pointed nose, and is remarkably active.

The weasel (*Mustela vulgaris*) is rarely equalled by any animal in nimbleness, and the sparkling eye and slim form bespeak the active faculty.

The long, active stoat, or ermine (*Mustela erminea*), with its agile limbs and sharp teeth, can kill a hare with ease, and is a terror to rats and mice; and chickens and ducks suffer considerably from its inroads. Its size is not much more than that of a common rat; but its superiority is in its pertinacious skill in pursuing all its game, its eagerness, and agility.

We should think those proofs from the animal world must be sufficient to satisfy observing and reasoning minds that form not only evinces character, but as truthfully manifests the strength or action with which the man or animal is endowed.

The importance of action, and rightly directed alacrity, cannot be too strongly impressed upon the minds of the youth of every clime.

> "Act well your part; there all the honour lies."—Pope.

A German poet has nobly sung—

> "Act! for in action are wisdom and glory;
> Fame, immortality—these are its crown;
> Would'st thou illumine the tablets of story?
> Build on achievements thy doom of renown."

And Hannah More inculcates the same precept when she says:—

> "The keen spirit
> Seizes the prompt occasion; makes the thoughts
> Start into instant action, and at once
> Plans and performs, resolves and executes!"

Innumerable instances of the same grand lesson have been sounded in the ears of lethargic humanity by all the philosophers and sages, as well as by those "gentlest, sweetest teachers of mankind," the poets. Would that all might take the teaching to heart, and emulate in their lives and conduct what none have more forcibly urged than Longfellow, in his well-known *Psalm of Life*:—

> "Lives of great men all remind us
> We can make our lives sublime,
> And, departing, leave behind us
> Footprints on the sands of time.
>
> Let us, then, be up and doing,
> With a heart for any fate—
> Still achieving, still pursuing,
> Learn to labour and to wait!"

RELATIVE PROPORTIONS OF WIDTH TO HEIGHT IN MANKIND.

The laws of magnitude, that is to say, the length and breadth, height and width of all growing bodies, are not so generally comprehended by mankind as they should be; and, indeed, notwithstanding that length is one indicator, and width another, of certain qualities in both animal and vegetable productions, the masses seem utterly to ignore the fact that they imply one thing more than another. That they are, however, is quite evident; for as the form or proportion of a thing is, so will be its character. Therefore do we assert that to obtain that knowledge upon which is based the fundamental principles of the creation, both height and width require to be observed in their relative proportions. The length of animals that are full and round in the abdominal region, is not observed to be the same in proportion to their width, such as the ox, hog, elephant, and grizzly bear. These have a well-developed roundness throughout their entire structure, and a peculiarity of nature far different from the elongated giraffe, or the slim grey-hound, or the active and nervous weasel. What a vast difference in disposition and appearance have these two diverse sets of animals, as unlike in natural inclinations and instincts as in body. Indeed, everything in nature corresponds in the same ratio with another. For instance, if the features be round, every peculiarity of the whole structure will be in accordance with it; if, on the other hand, the features are long, the whole animal will correspond in length and spareness of form. So also will its disposition be marked with either more or less of a certain sharpness or intuitive keenness unknown, or seldom perceived, in the more roundly-built animals. And also do those Physiognomical signs apply with equal force to mankind ; because man, on scientific principles, is an animal like the rest, and only distinguished from the brute creation by a higher order of formation, and the balancing powers of a superior reason.

When we find persons blending the relative proportions of width and length together in an equivalent degree, we perceive that beauty of form and symmetry are their combinative results. The extremes being blended, correct each other, softening all the harsh outlines which would attend either one solitarily; and the result of this is that harmony is produced, and consequently *beauty*.

Great height in any animal is a certain index of poor digestion, weakness, and shortness of life. Animals, on the other hand, of comparatively good width and massiveness are of excellent digestion, and live to attain a great age. Thus is the elephant a long-lived animal, while the greyhound reaches the terminus of his life in, at most, a few years. The same law is equally applicable to the members of the vegetable kingdom; hence the oak, and the more ponderous trees of California, attain an incalculable age, while the poplar, fir, and other attenuated trees are of delicate constitution, and decay in comparatively brief periods.

Whilst travelling through Oregon, we observed that thousands of fir trees were broken away above or below their middles, indicating that brittleness in their slimness of form, which eventually shattered and sapped the foundations of their existence. Also does the law of averaged width and equable length hold good in mankind; for the well-proportioned man, equally removed from obesity and slimness, is invariably healthy, vigorous, and enduring. Napoleon remarked during one of his wonderful campaigns that it was not the tallest soldier who could endure the most hardship, but the one whose build was equally removed from all extremes. Men having equable length and breadth possess, moreover, good digestive powers, and the prognosis is that they will live longest. Tall and slim animals, on the contrary, die at an early age, for being of delicate organizations, they are subject to malarious, miasmatic, and other deleterious influences which most inevitably surround them. Besides this, they are also coarser in texture than the more equally proportioned, and hence liable to be affected by climatic influences, such as strong winds and oppressive heat or excessive cold. It is notable that the tall poplar sways with every blast that whistles through its trembling branches, while the oak, in its vast and massive proportions, faces the hurricane with defiant air, and withstands the blasts of centuries.

This law of length and breadth, therefore, is universal, and governs everything in nature: whether it be in mankind, animals, or vegetables, it is equally applicable.

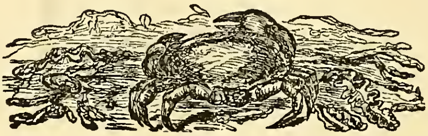
Again, the lion is modelled on the round principle, and consequently possesses that extraordinary texture of physique and force of vitality which makes him so fine and compact in his organization. On the other hand, the tall giraffe or camel-leopard is formed on the slim structure, and so weak, indeed, is he, that the lion can kill him with a single stroke of his powerful paw; being also on the long and slim build, his life is of much shorter duration than that of his nobler and more magnanimous enemy.

Notwithstanding, however, the foregoing instances of strength and weakness to which we have thus far alluded, there are cases into which we must penetrate more closely to obtain a true diagnosis of facts relative to slimness in the human form. For instance, some very short people are slim by reason of being stunted in early age through divers causes, but if their height is fully proportionate to their width, they may to a certain extent enjoy the same powers of longevity. All animals built on this plan possess the same qualities and characteristics as mentioned heretofore in this article.

Animals on the slim and elongated principle are best known, as the giraffe, the race-horse, the deer, and certain varieties of dogs and birds. Corresponding specimens can also be found among men. Characteristics of great action, with less endurance and strength, are invariably found in the taller specimens of both the higher and lower grades of the animal creation. Indeed, the same principle is recognized in all motive power, whether animal or mechanical. For instance, the tall, large-wheeled passenger locomotive bounds the track with lightning-like velocity, yet it would be unable to draw the train which is trundled slowly along by the low, diminutive wheels of the freight engine. The lion or grizzly bear can carry an ox for hours through forest or jungle, and, indeed, over the rockiest prominences of their native wilds, with the same ease that a cat could bear a mouse; yet, in a fair race, the greyhound could outrun and leave them miles behind him in a few hours. Who has not read of the little, active, and slim David, slaying, with a pebble from his sling, the huge and rounded giant, Goliath; and yet could Goliath, with his Herculean strength, have reduced a company of Davids into instant annihilation. Then again, Sampson, with his massive arms and immense shoulders, exerted a strength, in the tearing down of the Philistines' temple, that immolated himself and thousands of his enemies, and yet any school-boy could, doubtless, outrun him. As an example of tremendous physical strength, Dr. Windship of Boston can lift 2,600 lbs. with straps over his shoulders. Now, let us note the manner of his build: he is short and broad, with muscles on his shoulders as hard and prominent as those of a draft-horse; while, on the other hand, the famous American pedestrian, Weston, is of spare build, and could probably walk more in one day than the formidable Windship could in two or three. Strength, as an invariable rule, is found in broad bodies, while its opposite action may be traced to men of little or no ponderosity.

Hence, Windship, with his wonderful development of physique, has a compact, fine, hard, and strong muscular organization; while Weston, with his almost incredible powers of activity, is less hard than springy, lighter, more porous, and consequently flabbier in general construction.

The blending of these adverse conditions is common enough, but the manner of their amalgamation with its full comprehension is where the difficulty lies, and which to attain by accurate solution requires study, observation, and extensive research. As a general rule, the mouth and chin are excellent indicators of the slim or even round varieties of the animal species. Indeed, where we find a wide mouth and wide chin, the other surrounding features are likewise large; hence the massiveness of the Physiognomy invariably indicates the massiveness of the body, and governs the whole texture, be it in man or animal, with equal solicitude. The abdominal form of such an individual also predominates. However, if you should discover that the mouth is diminutive and the chin narrow, then the long and slim order is in the ascendant.



PENETRATION OF MIND.

This faculty shews an extraordinary development in some people, and so keen and discriminative are those who possess it in an inordinate degree, that they are enabled to peer into our very souls, and to penetrate with equal facility every passion and energy of the human mind. Now, the word *penetrate* is, as every intelligent reader knows, a transitive verb, signifying, to enter; and in the present instance, we might define it with equal accuracy by iterating, as it relates so directly to passing thought, that it is an expression used to divine the inmost workings of one's mind, or to enter with intuitive power into the occult capacities and passions of the understanding.

When in nature or mechanism we wish to discover penetrative qualities, we select objects of decided sharpness; for dull implements, like dull people, are over-thick in their bluntness, and not at all adapted to the nice distinctions of penetration or perception of character. Hence, having the objects of this brief article partly explained, we reiterate that persons possessing the qualities of great insight, acuteness, and sagacity of character are discovered invariably to have sharp features. The features and the mind, therefore, in this respect, have synonymous significations. The one creates the other, and the effect must of necessity bear a similarity to the cause which is plainly evidenced both in nature and philosophy. As the mind becomes sharp, penetrating, and discerning, so will the features assume a like sharpness. Therefore we assert that animals with sharp features are always keen, discerning, acute, sagacious, and Argus-eyed;—illustrations of which can be found in the fox, eagle, crow, and greyhound, all noted for a cast of features of sharpened prominence. Note how keen they are in every action, and how readily they comprehend and avoid danger. The hunter will tell you of the difficulty and nice perception which attend a fox-hunt before they can trap the animal. His insight into men and things is of a penetrative character, hence the difficult task of capturing him. Also is the eagle a keen, sagacious bird, and when his liberty, or perhaps life, is jeopardized by the sportsman, he makes good his safety by flight. The crow, diminutive, black, and grim-looking, is ever on the alert for danger, and penetrates the designs of man so well, that a trap is rendered nearly useless to catch it. Then comes the greyhound, an animal very agile of body, and no less quick of mind, whose discernment of the motives and likes of man seems strangely intuitive, from his remarkable rapidity of understanding them. We must therefore acknowledge, from the foregoing chain of natural sequences, that sharp noses, sharp eye-bones, sharp chins, and the whole expression denoting sharpness of form, indicates shrewdness, discernment, aptness, also astuteness, acumen, archness, and subtlety.

FACIAL SIGNS OF DISEASE.

One of the saddest subjects of history—not even the ravages of war excepted—is that of disease. When the world was young, and each individual in it had sufficient space in which to breathe with freedom the pure air of heaven, disease may be said to have been a comparative stranger. But when men began to multiply upon the earth, and live in closer proximity to each other, gaunt sickness made its appearance, and, irrespective of age, wealth, or rank, laid its withering hand upon the springs of human life, and gradually shut up its thousands in premature graves. What is true of the world as a whole is equally true, in a particular sense, with respect to individual nations. When a country is young, and bears on its soil the tread of a limited number of settlers, the physician's office is, in a large measure, but a sinecure. But as years roll on, and the population increases, both from within and from without, the causes of disease seem to multiply, until grave-digging and funeral-undertaking become not only regular, but lucrative trades. War, like Saul the son of Kish, has slain its thousands; but of disease it may be said, as was sung of Israel's greatest king, that it has slain its tens of thousands. Nor could the world last long were it otherwise. Nature does not seem to be able to provide for an unbroken stream of population, and, therefore, all over the earth she sends disease, to this city and to that, to this village and to that, to this hamlet and to that, removing with a merciful hand the few for the sake of the many. We say with a merciful hand, for what could be more unmerciful than to allow the population of the world to outgrow the material provisions of nature? Thus civilization, under the guidance of a kind Providence, both builds up and pulls down. The vessel which carries within her the seeds of intelligence and culture to be scattered over some benighted transoceanic country, bears with her also the elements of disease of which the new country knows nothing; but for which its heart is grateful in after years, when able to look at things with a common sense, philosophic eye. That which is superfluous, nature tries to get rid of, not only in things inanimate, but among men as well, so that during a campaign, as if dissatisfied with the number shot on the field, she scatters disease among the unwounded, until the slain in battle are as nothing compared to those who gradually succumb to consumption, fever, &c. Thus do we see working around us a beautiful balancing machinery, which, while lopping off individuals, makes arrangements for the prosperity and happiness of the whole. Nor is there anything arbitrary in this. It all happens according to natural law. There is no stern, inexorable being over us, pushing disease into our bodies. If we put our fingers into a fire, our fingers will be burned; so by the same law, when certain conditions are fulfilled among men, and they are surrounded with certain circumstances, disease springs up naturally, and they are seized and die. And if men will violate the laws of nature, as they seem to be determined to do to the end of the chapter, it is in harmony at once with justice and mercy that they should suffer the consequences. Suffering, however, is not an end; it is but the means to an end. And so we see the Great Parent of us all, taking advantage of human folly and human violations of law, in order to work out the world's happiness.

Having made these preliminary remarks, we shall now turn our attention to the subject-proper of this essay—viz., *Pathognomonic signs or diseases, and how to discern liabilities or tendencies to them in the human system.*

Persons with large heads and small delicately-constructed bodies, will be found very liable to have consumption or dyspepsia; because the head, taking to itself an unproportionate amount of nourishment required for thought-producing purposes, deprives the lungs and stomach of that which is necessary to their strength and full development, and these organs, gradually becoming weak, are, as a natural consequence, laid open to disease. The primary cause of consumption, it is said, is a lack of fresh air. In a body not sufficiently oxygenized, there is produced a cheesy kind of matter called tubercle, which moves about in the blood, and lodges itself in the first deranged organ. When cold is caught the lungs get deranged, and losing the power of passing on unnecessary blood, they receive the tubercle, and immediately consumption begins. Now, a weak body made weaker by the suction of a disproportionate head, cannot very easily inhale a sufficient quantity of oxygen, for not only are the lungs weak, but there is a corresponding weakness in the skin, the pores of which have been called the surface lungs: of such, therefore, a predisposition to consumption may safely be predicted. Individuals, again, whose lungs are large in comparison to other parts of the body, are very liable to scrofulous diseases; while it may be affirmed, without the slightest hesitation, of corpulent people, that they have a predisposition to inflammatory rheumatism, apoplexy, gout, fevers, and diseases lying on the same line of causes. People with a bony frame-work, indicating a dry, juiceless constitution, not at all favourable to bodily secretions, have sure signs of a tendency to liver disease and chronic rheumatism. People with such a constitution will also be found to have a dry, inactive skin. When the face is of a waxy or tallowy complexion, with a hollow on each side over the inferior maxillary bone, an inch and a-half from the point of the chin, we may safely conclude that the individual is subject to weakness or disease in the kidneys; and when the inner corners of the eyes are hollow, and of a bluish tinge, there can be no doubt that pharyngeal catarrh is making sad havoc in the head. Again, hollow cheeks indicate a weak stomach; and narrow nostrils, accompanied with a hectic flush on each cheek, back from the junction of the nose with the face. give evidence of weak lungs, and a liability to pulmonary disease. When the skin across the forehead and in front of the ears is of a yellow or sallow hue, tinted with brown spots, this indicates weakness and general inaction of the liver. In severe cases of sickness, brought on by disappointment in love, the clear lustre of the eyes, directed toward the lost and precious object, retires, the eyelids droop, and a vivid florid colour settles upon the lips, while, in cases of extreme passional desire, the eyes seem to roll up, the lids to close more nearly, the mouth to open slightly, the tongue to be laid carelessly on the edge of the teeth. and the lips to take on an increase of colour. It was in this manner that Hogarth, one of the world's most original artists, painted Danae—a victim of passional love. Here we give, from memory, an instance in which the great physician Erasistratus discovered this love passion lurking in a patient and sapping his very life. Antiochus, the Crown Prince and son of King Seleucus, fell passionately in love with the young Queen Stratonice, his stepmother, who had given birth to a son by Seleucus, his father. The prince, being overpowered by his passion, fell sick and refused all manner of nourishment, being determined to put an end to his miserable life. Erasistratus, with his keen and practised eyes, observing the change of his countenance, and also of his pulse, whenever the queen entered the room, was very soon convinced that the prince was dying for his mother-in-law; and knowing something of the old king's tenderness for his son, he, one morning when the king enquired about his health, told him that the sickness of the prince was caused by love, and that it being impossible for him to possess the object loved, his disease was incurable. "On what ground," demanded the king, "is the passion of my son incurable?" "Because," answered Erasistratus, "he is in love with the person to whom I am married." Thereupon the king begged him by all his past favours to save his son and successor. "Sire," said Erasistratus, "would your majesty but imagine yourself in my place you would see the unreasonableness of your wish." "Heaven is my witness," said Seleucus, "that I could resign even my Stratonice to save my Antiochus!" At this point the tears ran down the king's cheeks, which Erasistratus observing, he took him by the hand and said, "Sire, if these are your real sentiments, the prince's life is safe; it is Stratonice for whom he pines." On hearing this, Seleucus immediately gave orders to solemnize the marriage of his son to the queen, which was attended to, Stratonice generously exchanging the father for the son.

Passionate, silent, unrequited love is the worm which eats the heart until not only the blossom and the leaves, but the whole green, once hopeful life entirely disappears. Study well the indications given above, and you will have no difficulty in detecting it.

A lank or sunken cheek opposite the molar or double teeth invariably indicates a weak stomach; and hollow temples are indications of a weak liver.

Private diseases affect more or less the generative organs, and consequently the eyes, because they are connected, as explained on page 299. Be watchful, and you will find that men who are slaves to that horrible practice by which the systems of young people are so often drained cannot look you steadily in the face. Their eyelids droop, all manly stamina is gone, they are subjects of remorse, and are easily detected. Leucorrhea, when settled, is indicated by what may be called a "livid hue" about the mouth, and discoloration round the under eyelids, and in cases of gonorrhea, the eye becomes dull and watery, while in constitutional syphilis the iris of the eye will often change to a green hue. An unusual redness of the entire face too often signifies moral sickness, while blotches settling surely, though slowly on the countenance, proclaim the open or secret inebriate. Well may we say, in the language of Shakespeare, "O thou invisible spirit of wine; if thou hast no name to be known by, let us call thee Devil." We have thus given a synopsis of Pathognomonic signs, without going into the causes of disease. These, no doubt, are many and varied, some having their origin around us, others springing up within us; but is it not a fact that medicine vendors help, if not to originate disease, at least to prolong it? However this may be, the Scotch sexton, who was rebuked by the parish doctor for an insignificant mistake he had made connected with the ringing of the church bell, spoke more truth than medical men in general, and village doctors in particular, would perhaps be prepared to admit, when he gently replied, "I think, Dr., you might look over a small mistake like that, for it's well known that I have covered up many of your faults." We have just hinted that medical men are slow in taking blame to themselves when patients succumb under their treatment, and this happens, as the following illustration will shew, even when it incurs loss to themselves. A gentleman, whose wife was sick, being strong in the business faculty and apt at a bargain, said to the doctor when that functionary called, "Before you go to work, doctor, I wish to make a bargain with you, and this will save all ill-feeling when your account is sent in. Whether you kill my wife or cure her, I promise to give you twenty pounds. Does this satisfy you?" "Quite," replied the doctor, and went to his work. The wife having died in his hands, he called shortly after the funeral and presented his bill. "Did you cure my wife?" asked the widower. "No," answered the doctor. "Did you kill her?" continued the widower. "I certainly did not," replied the doctor. "Then," added the widower, "I have nothing for you; the bargain being, as you must remember, twenty pounds whether you killed or cured her." The astonished doctor seeing his mistake, but not feeling free to confess—whatever might be his private opinion—that he had, by negligence or ignorance, helped to send the deceased to her grave, was obliged in consequence, to leave the house without his much-desired fee. There are, however, instances of honesty, even among the disciples of Esculapius. A witness being examined in a court was asked the following questions to which he gave these memorable answers—"Did you ever tell a falsehood?" "Sir, I am not a lawyer." "Did you ever poison anybody?" "Sir, I am not a druggist." "Come now tell me honestly did you ever assist anybody into the other world?" "I must confess (very solemnly) that I am a doctor."

We may laugh at the above exhibitions, and no doubt we do; at the same time we cannot shut our eyes to the fact that, with the increase of doctors, comes an increase of disease. Of course this statement might be reversed, and perhaps with plausibility, but while we readily admit that a goodly number of the Faculty practise self-denial, and live day and night for the good of society, it cannot be successfully denied that the medical profession can boast of more ignorant, stupid, selfish, money-seeking members (the clergy excepted) than any other profession in the world. As an illustration of what we mean, take the following. An aged doctor had a *very wealthy* patient whose hand was injured, and the case being an interesting one, the doctor made his visits as frequent as possible. Several prescriptions were recommended, but instead of improving, the hand daily grew worse. One day the old doctor, not being able to attend the patient himself, sent his son, who had just begun to practice, and who was not very deeply skilled in the secrets of the profession. When the son returned home, the father asked how the old gentleman's hand was to-day?" "All right," was the young man's reply, "I found a thorn in it and extracted it, and now all's well." "You are a born fool," replied the father, "why, you have gone and spoiled the job." Now, what can be said of such men as this old doctor, but that they are heartless, and could look on and see their patients suffering the most excruciating pain, and even increase it, if only by that means they could make themselves rich. We confess that we have a great admiration for the manner in which Old Nicholas of Russia treated *his* medical advisers. Once, when in the company of a German prince, who was often prostrated by sickness, he asked him how he dealt with his doctors. "I suppose I do just as other people do," replied the prince, "I pay them for attending me when I am ill." "Why, then," replied Nicholas, "you have but to adopt my system, and as sure as you are a prince, your good health will return." "And what is your system?" asked the prince. "It is this," answered the Czar, "I pay my doctors so much per day when I am well, but the moment they allow me to become sick their pay is stopped, and that I believe accounts for my good health." The prince being struck with this plan, adopted it, and it is said that he was so very seldom ill afterwards, that he never ceased to be grateful to his imperial counsellor. Let the wealthy reader go and do likewise.

FASHION; OR, MAN DEFORMED BY ARTIFICIAL MEANS.

It is unquestionable that of all the objects which we usually call works of nature, none is so beautiful as a perfect human form. Fine specimens are found in the region between the Mediterranean, the Black, and the Caspian Seas—that region in which, according to history, the Caucasian race first came forth as the highest type of mankind. In proportion to his removal from the place of his origin, and intermixture by marriage, or otherwise with other races of people, he is found superior in intellectual capacity to the unmixed races who inhabit the three southern continents, where the most deformed, as well as degenerate races are located. It is not given to us to trace out the steps of this degeneration either in nature or history. But we are to direct attention to some of the capricious methods by which men have artificially disfigured themselves in obedience to some law of fashion that has acquired ascendancy over good taste and common sense, and counteracted the efforts of nature to produce beautiful forms of human kind.

Almost every nation, during every age, has had some peculiar fashion of this sort. Some races have compressed the head into unnatural shapes, others the feet, and others, again, the waist; some have added unnatural colours to the body, others have removed part of the hair that was given for its covering; and so on in endless variety. It is impossible to assign a cause, or trace the origin of each of these fashions. But one need only open his eyes in any church, hall, or other place of public resort, even in these Christian lands, to assure himself that fashion has prescribed many things both inconvenient and deleterious, and has found willing and obedient subjects ready to sacrifice themselves to her pleasure. Houses are desolated, hearts are broken, properties are squandered, thousands are thrust into untimely graves, and the regions of the lost in the unseen world are filled, as the result of this slavish obedience. Aches, pains, misery, and even death itself are willingly endured by the votaries of fashion. It breeds discontentment, vice, and crime; woman is robbed of her virtue, and man of his honour, in order to satisfy her unconscionable demands.

The love of praise may safely be considered as the supporter and feeder, if not the instigator of fashion; but it is difficult to discover how men came to praise what is ugly or injurious, so as to induce its cultivation. Perhaps a key might be found in the circumstance of some distinguished personage having been the subject of a natural or accidental deformity. It is matter of history that in the reign of Henry VIII., gentlemen about the English court used to stuff their waistcoats in order to produce an imitation of the king's corpulence. More recently, English ladies affected what was called the Alexandra limp, pretending to be partially lame, because the beloved princess was so. Whatever the reason in other cases, the fact is, that no part of the human body has been exempt from tampering influences and artificial changes, produced by some nation or other as matter of mere fashion.

Beginning with the ancients, we find Hippocrates recording that the human head had been tampered with and artificially moulded even before his day. Senertus also thought of this as among the causes of ill formed heads, that the tender skulls of infants were bandaged by midwives and nurses, and moulded with the hand, according to their irregular and varying fancies.

The earliest people whose practices in this way are particularly recorded were the Macrones of Pontus, who compressed the head into a tall shape, whence the name, Macrocephalic, or great heads, as in fig. 1.

Those having the highest heads were deemed the most perfect gentlemen. As soon as the child was born, the head was carefully compressed to secure the desired height; nor were the efforts relaxed until the skull had become sufficiently hard to secure the continuance of the form throughout life.

Hippocrates informs us that the Scythians, who inhabited Phasis, chose a head formed like a sugar-loaf, as a token of nobility, to distinguish the high-born from the vulgar. In process of time, all the children were born with conical heads, and the arts of the midwife were dispensed with; whereupon nature, left to her liberty, turned by little and little to recover her natural configuration. The Silesian, Atticke, Argive, and Phoxi were noted in ancient times as having turbinated heads. Also the people in Peru, two hundred years ago, had wonderful coronal accuminations. Strabo mentions Indians who had piked and wedge-shaped heads. And to this day, there are American Indians along the banks of the Columbia River,

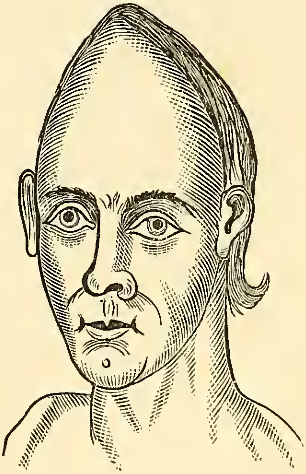


Fig. 1.—A Macrone.

and on the island of Victoria, whose heads are wedge-shaped and conical. The following cut of a Quatsino Indian is a fair representation of the sugar-loaf head as found among the Indians on the north-western portion of Vancouver Island.

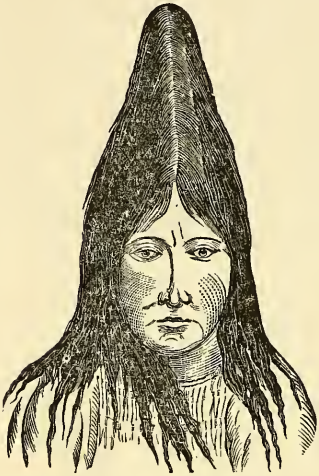


Fig. 2.—A Quatsino Indian Girl.

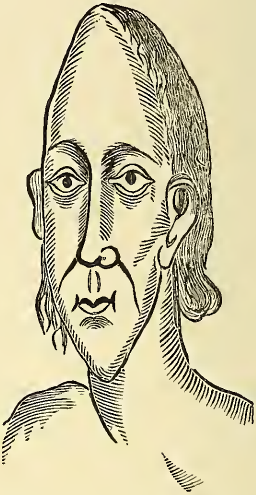


Fig. 3.—A Cumana Woman.

These heads often measure from fifteen to twenty inches between the eyes and the top of the head, exclusive of hair, and are formed by binding the heads when soft with strips of bark.

We are told of a pine-apple form of head as characteristic of the Genuensiants in former times; and Licosthenes says that in Ploa, a town of Voitland, tall headed infants were occasionally born as late as the year 1545, these being relics of the effects once produced by artificial means. Scaliger records that children are born with compressed temples as a result of the efforts of former generations. The women of Cumana cultivate the long face and high head by compression, as in fig. 3. Perhaps it is from some hereditary tradition in favour of high heads, that, until very recent times, the women of Wales wore tall, conical hats. I have seen them attending markets, fairs, and places of public amusement, as in fig. 4.

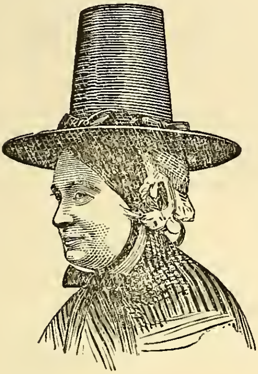


Fig. 4.—A Welsh Woman.

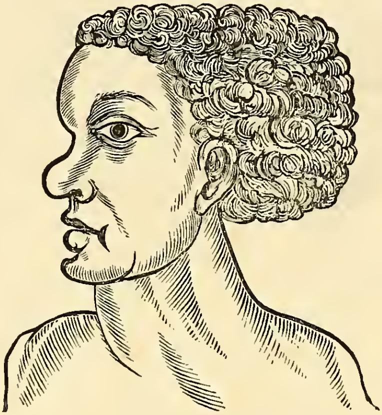


Fig. 5.—An Egyptian Man.

On the other hand, the people of Sigiunus, a city of Egypt, take pains to secure a low and flat form of head, as in fig. 5. The low Dutch, the French, and the Portuguese incline to low and elongated heads, more or less flat on the top. This last peculiarity is observable in the people of Brazil also.

Broad heads are the fashion with the Muscovites, as in fig. 6.

Their heads and faces are flattened artificially during childhood, to secure what is considered a genteel form. The Apichiquit Pichunsti, Sava, and some other Indian tribes, cultivate the broad head by laying a board or stone on the infant forehead, and another on the neck, and binding these together until the form is fully established by age, and the bones so hardened that they retain their unnatural shape throughout life. A flat-headed Indian of North-Western America is here introduced, to shew how they fashionably deform what the Creator has so beautifully designed (see fig. 7).

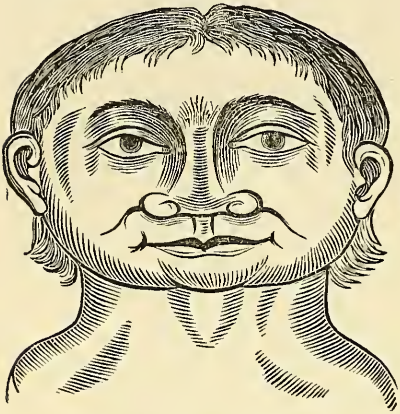


Fig. 6.—A Muscovite Man.

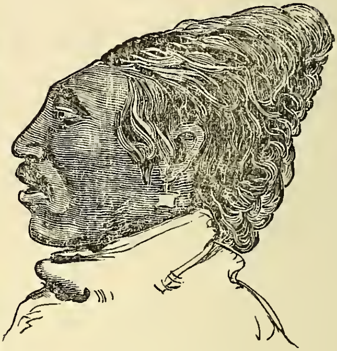


Fig. 7.—A Flat-head Indian.

Two hundred years ago, there were men in Old Port, in the West Indies, who cultivated a square form of head by artificial means. When the child was young, they used boards on the sides, and even wooden boxes to inclose the skull, until nature not only retained the shape in the

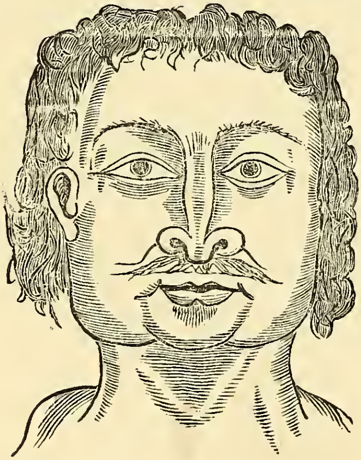


Fig. 8.—A West Indiaman.

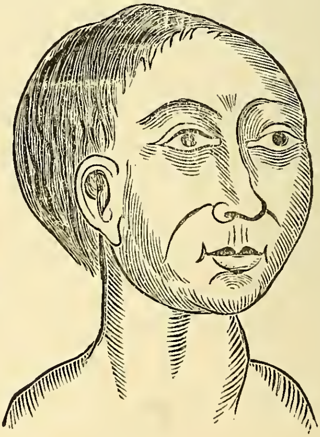


Fig. 9.—A Greek Man.

individual so treated, but transmitted it to future generations by the production of children born with these square heads.

The Ancient Greeks were otherwise minded. They were celebrated for admiring a globular shape of head. (Fig. 9.) Pericles the Athenian, who, as Plutarch informs us, had a long head, in shape like a mallet, became an object of ridicule to the comedians of his day on this account; and the Attic poets nicknamed him Cynocephalum—that is, dog's head.

Albertus Magnus commended round heads, adding, that this form was promoted by the cares of the nurses in moulding the infant skull.

To this day the Grecians and Turks rejoice in the possession of heads bearing considerable resemblance to globes; and the peculiarity is said to be still cultivated by compression in childhood.

Megasthenes, Pliny, and Gellius, whose tastes were doubtless formed on the globular type, proclaimed that in Scythia there were people with dogs' heads, as in fig. 10.

Other able and truthful authors assure us that the dog-face is common in Tartary. Marcus Paulus, a Venetian, mentions an island called Daganian, of which the inhabitants "have heads like unto dogs;" and Pausanias records that Euphemus, by descent a Carian, saw such people in the islands of the ocean, when he was driven on their shores by adverse winds, as he was sailing towards Italy.

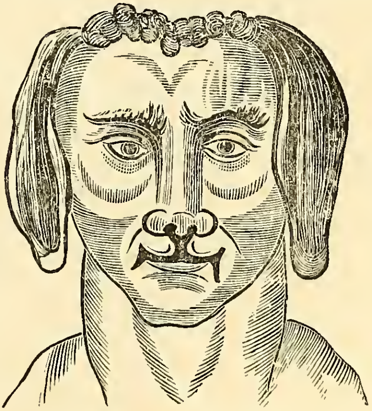


Fig. 10.—A Scythian Man.

Several ancient writers have spoken of Acephali, or men without heads. Hela says that the Belinii are headless, and have all the usual features of the face in their breasts, as in fig. 11. Solinus gives the same account; so does Gellius. Pliny affirms the same strange fact; and St. Augustine expresses himself thus:—"I was Bishop of Hipo, and, with certain servants of Christ, I travelled to Ethiopia to preach the Gospel of Christ unto them; and we saw there many men and women having no heads, but large eyes fixed in their breasts, their other members like unto ours." Fulgosus repeats in substance the testimony of Augustine. Sir Walter Raleigh says that the Ewaipanomi are a strange, headless race, and mentions a people on the River Caora whose heads appear not above their shoulders. This is probably the true explanation of the Acephali wherever found. The head has been thrust down, and the shoulders raised, until no throat was visible, and the facial features appeared to be in the breast.

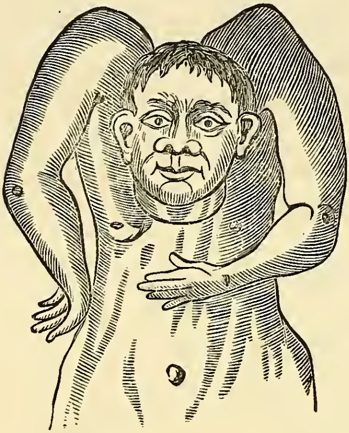


Fig. 11.—A Belinii Man.

Another set of fashions operates on the noses of human beings. The islanders of Zanzibar used to have their noses turned upwards; and the size of nostril in the females, which to a stranger must have appeared a great deformity, was reckoned the height of fashion. (Fig. 12.)

On the other hand, the Huns used to flatten down the noses of their boys, that these protuberances should not hinder them in donning their helmets—one of the few vagaries that even pretend to have a reason for their existence. In Caffraria, Lower Ethiopia, and Mozambique, flat noses are in request: it is preferred that they should be so by nature, otherwise artificial methods are employed. The inhabitants of Tartary used to cut and pare down the nose, especially the upper part between the eyes, covering it with black ointment. Friar William, Dr. Bubraquis, a Frenchman, reports that when he visited the court of

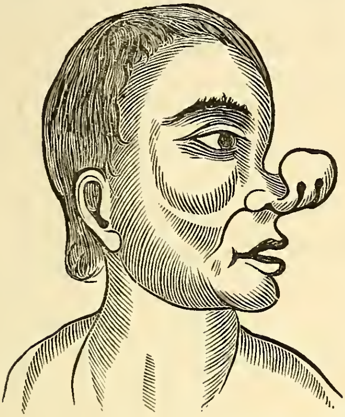


Fig. 12.—A Woman of Zanzibar.

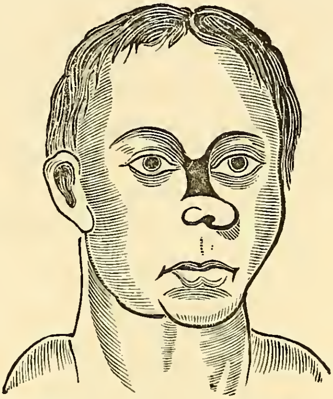


Fig. 13.—A Woman of Scatia.

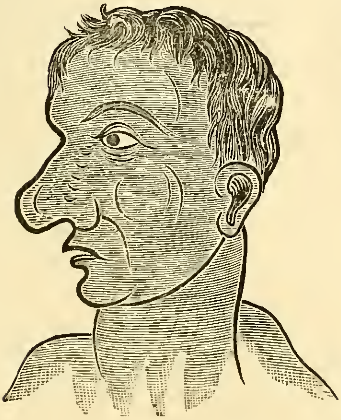


Fig. 14.—A Peruvian Man.

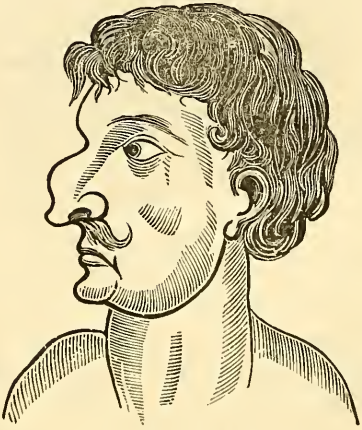


Fig. 15.—A Persian Man.

Scatia, he observed that the queen had her nose quite pared down on the upper part, so that the space between the eyes was flat. It requires little stretch of imagination to fancy what would be the effect on a nation of such a fashion set by the queen (see fig. 13).

In Peruviana, hundreds of years ago, a large nose was considered desirable, as in fig. 14. The people took great pains accordingly to pull the nose out of its natural dimensions. The Persians of old held high noses in admiration, Cyrus having had such a one; and they would allow none but aquiline-nosed persons to rule over them.

The women of East India bore the wings of the nostril, and wear in it rings and other ornaments, as in fig. 16.

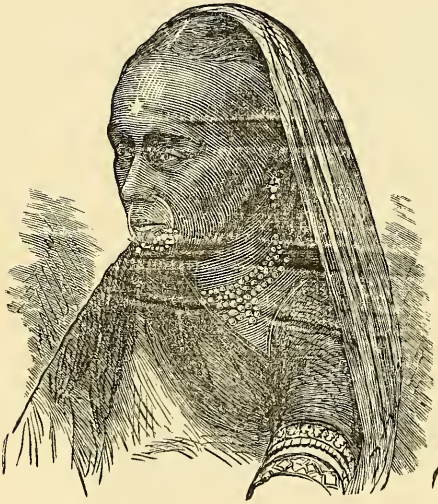


Fig. 16.—A Kyast Banian Woman, of Surat, in Western India.

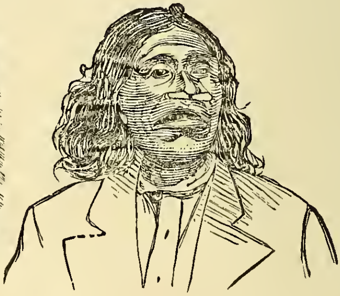


Fig. 17.—A Flat-head Indian.

Some of the North American Indian tribes bore their noses through the septum, and insert sticks, quills, or pieces of ivory, holding this style to be a mark of beauty. For, however horrid a fashion may be, or destructive of real beauty, it will be adopted throughout any nation, if only it be used by the nobility or other leaders of society.

The black people of Cornori formerly had horribly large ears, from which hung numerous rings set with stones; and, as a general rule, the nobler the woman's lineage, the larger were her ears (see fig. 18).

In the city of Cochi the women used to put large pieces of lead in the lobules of the ears, and draw them down to an enormous length, as in fig. 19.

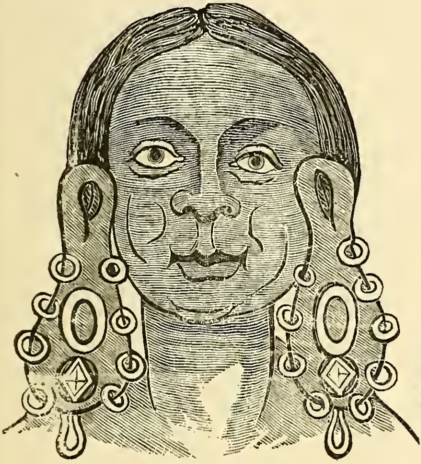


Fig. 18.—A Cornori Woman.

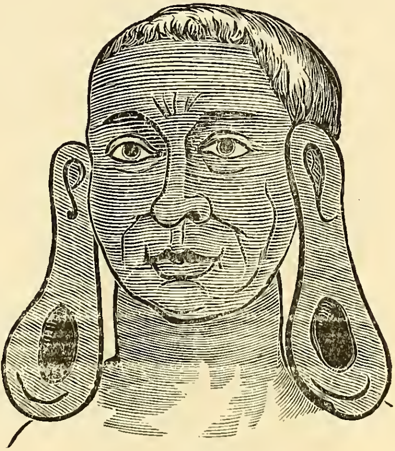


Fig. 19.—A Cochi Woman.

The men of Cochi also became enamoured of this, to us, repulsive fashion, and extended their ears in the same manner as the women. The ladies of our own country are fond of hanging jewels by holes bored in the ears, but it is merely for ornament, not for distorting or enlarging the organ; small ears never lose their claim to admiration among us; but earrings, which went quite out of fashion about forty years ago, and were under ban for at least twenty, are now all the rage again.

In Turkey, those women who had the largest mouths were at one time accounted the most beautiful; and as art is always called in to metamorphose nature in obedience to the demands of fashion, however absurd and tyrannical, Turkish women succeeded in displaying mouths to remind us of an annual lease, which is from (*y*) ear to (*y*) ear (see fig. 20).

There is an account given of a people in Ethiopia who made a practice of drawing down the under lip, until many times it was found to measure eighteen inches in length. Salt was used to prevent the putrefaction to which the soft inner skin would have been liable from such exposure to the action of the sun and air.

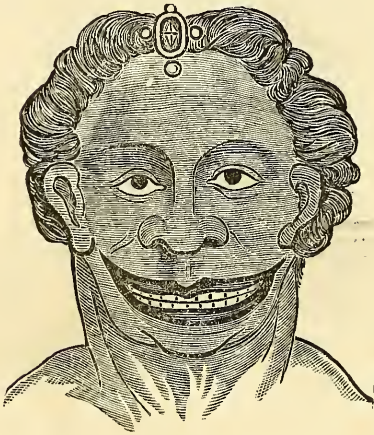


Fig. 20.—A Woman of Turkey.

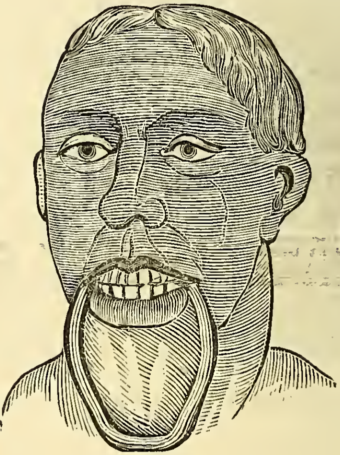


Fig. 21.—An Ethiopian.

Those cannibals called Paries formerly had a custom of boring three large holes in their faces, one in the under and two in the upper lip, as in fig. 22. Into these holes they inserted green stones.

Some of the tribes about Sierra Leone have been observed with teeth filed to points, so as to resemble saw-teeth; and to this day the practice is continued among many of the tribes in Ethiopia and Mozambique. Fig. 23 exhibits the fashion of sharply-filed teeth that once prevailed among the Macus.

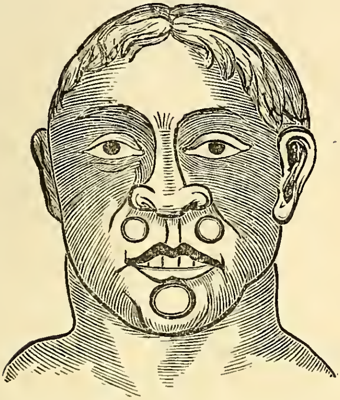


Fig. 22.—A Parie Man.

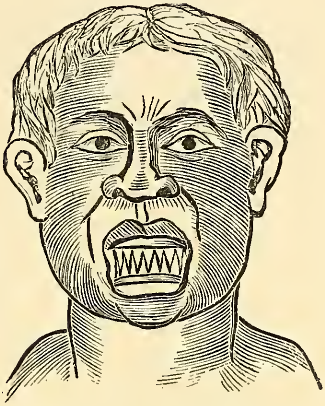


Fig. 23.—A Macu Man.

In the island of Tanibali there once lived a set of people with artificially-cloven tongues (fig. 24).

It is said they used divers kinds of language, and imitated not only different voices of men, but the singing of several birds. The slit which formed the division was in the middle of the tongue, and parallel with its greatest measurement; the organ was, therefore, in no wise seriously injured, or its ordinary functions interfered with. Galen, the celebrated physician of Greece, demonstrated to the ancients that the tongue was by nature double, each side being supplied with a separate set of vessels, nerves, &c., so that each side was supported

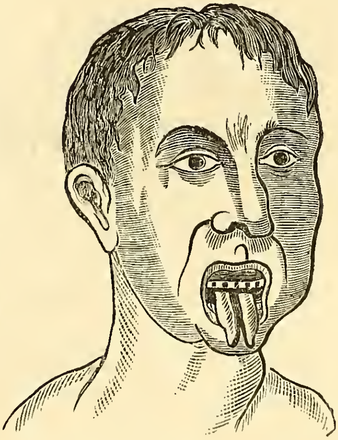


Fig. 24.—A Tanibalian.

independently of the other, and could perform its functions alone. Modern anatomical dissection has confirmed this view, and demonstrated the duality of the tongue and brain, as well as of the eyes, ears, heart, lungs, kidneys, and other bodily organs which are more obviously double.

Small hands and feet in the female sex are, among European nations, generally esteemed as indicative of genteel birth and refinement. The ladies of Portugal, especially those among the nobility, used to cultivate this elegance by artificial means in the olden time. The hands of female children were bound with cloth to retard their growth, and promote a soft and delicate appearance. Of course, this must have been practised with moderation and care, or the shape of the hand would have been greatly disfigured (fig. 25).

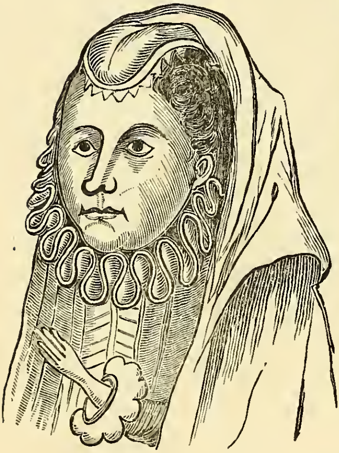


Fig. 25.—A Portuguese Woman.

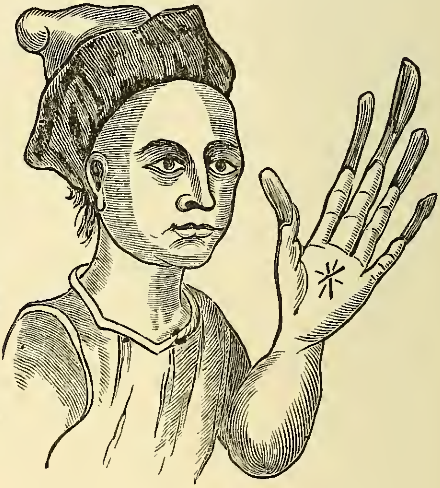


Fig. 26.—A Chinese Man.

Marchus informs us that the people living along the banks of the river Thomeras used to have hard, sharp, and very long nails, with which they killed fish, and cut soft wood, as they had not learned the use of iron. Even now there are people in China who wear their nails so long that they can use them instead of forks, or rather chopsticks. It is said that the nail is sometimes as long as the finger on which it grows. There must, of course, be unusual strength in such nails, or they would break off with use long before they attained such a size (fig. 26).

We have heard of coloured ladies in Demerara who cultivated long tapering nails, to shew that, through the indulgence of their temporary husbands, they were utterly exempt from every kind of work. There is reason, such as it is, in this fashion, which is more than can be said for most of those we are describing.

To come nearer home. Our own countrywomen—yes, and some of the men—have in various ages believed that

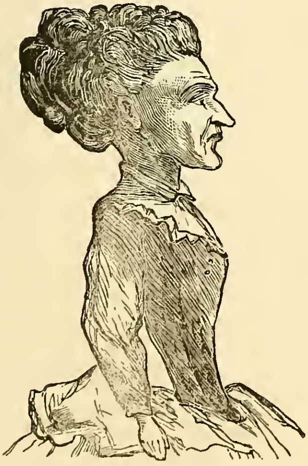


Fig. 27.—Miss Tight-laced. Young man, there is a life-time of misery tied up in this waspish form.

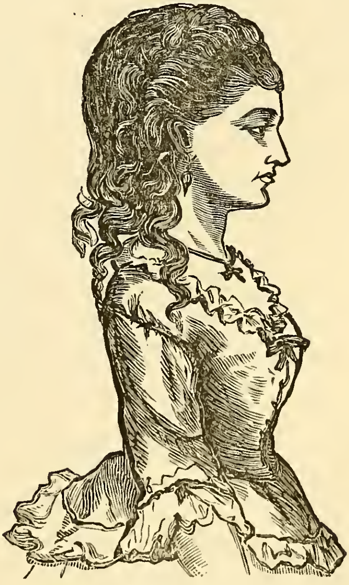


Fig. 28.—Natural waist. Here reside health, joy, and love.

a wasp-like smallness of waist was a great beauty. Any one above two score years of age can recollect that before he was in his teens, and for some time after, the ladies generally, and those among the men who were called dandies, used, especially on high occasions, to strive with might and main to lace their too tight stays as close as possible; the effect of which was not only an appearance obviously artificial, and very ridiculous (see fig. 27), but a condition of present pain and future danger. Thousands were sent to an early grave by this pernicious custom; the vital parts not having sufficient room to play, and becoming diseased. The fashion went out, however, perhaps because so many fearful examples of its fatal consequences had appeared; and after it, disappeared the custom of displaying the waist out of doors. Of late years, however, the shrouding of the figure has been cast off; none but grandmothers remember the miseries that obliged tight-lacing to disappear, and it is shewing itself again among our vain, silly, and characterless females.

Tight-lacing finds a counterpart, with far less injurious results, in the Chinese custom of bandaging the limbs and confining the feet. Moreover, only the nobility can afford to be thus crippled for life; and the practice, though cruel and to us repulsive, is quite circumscribed. Here is a representation of a Chinese woman with artificially compressed feet. Sometimes the part touching the ground is not more than two inches long (fig. 29).

It is difficult to believe that the subjects of the Celestial Empire really consider these malformations beautiful; more probably it is matter of pride, the disabled feet being indicative of the fact, that the lady was born in a rank of life to exempt her from using her nether limbs, and entitle her to be carried whithersoever she may please optate.

As the reverse of this, there is a people in India that rejoice in feet which measure eighteen inches; and they labour as assiduously to elongate these members as the Chinese do to shorten theirs (fig. 30). It must be admitted that the long feet are much more serviceable than those which are too short to admit of walking. In India beyond the Ganges, there once lived, as we are told, a race called Sciopedes, with feet of monstrous size; and at the present day, the inhabitants of Guinea are distinguished for long legs, broad feet, and enormously long toes. There are, however, no records by which we can trace the origin of these peculiarities to capricious artifices.

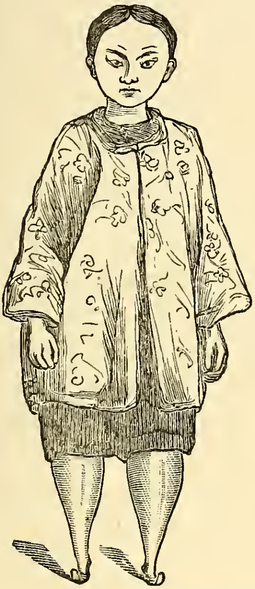


Fig. 29.—A Chinese Woman.

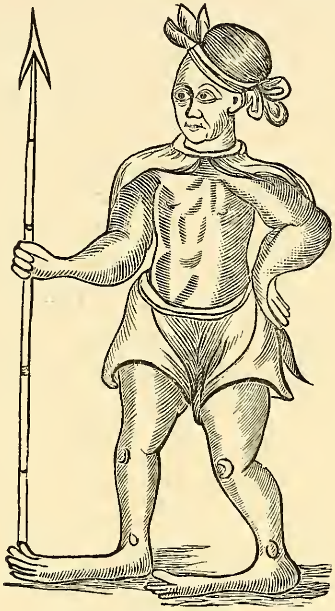


Fig. 30.—A Sciopede Man.

In America and England, the people have not always been wholly guiltless of tampering with their feet in obedience to the laws of fashion. To say nothing of the custom of wearing boots or shoes which are much too tight, for the sake of appearing to have a small foot, it is to be noted that during several centuries our own fashionables wore such long, narrow, pointed shoes, as must have been most inconvenient. We read of them so early as the reign of Henry I., when they drew forth the severe rebukes of the clergy. They were named *pigaciæ*, and are represented as having had points like a scorpion's tail. Sometimes they were stuffed so that they might be twisted like a ram's horn. It was said that these peaked shoes were invented by a gentleman who had a deformed foot; certain it was, though remarkable, that the ladies never patronized such extravagance of shape as the men did. In a work called *Eulogium* of Richard II.'s time, it is said: "Their shoes and pattens are snouted and piked, more than a finger long, crooking upwards, resembling devils' claws, and fastened to the knees with chains of gold and silver." In the reign of Henry VI., the points were no longer turned up, but they shot out to a most amazing length, ending with a point like a needle; and how the gallants contrived to walk in them is admitted to be one of the mysteries of history. What troubled the clergy more, perhaps, was the difficulty their people had in kneeling, "For," says one in Charles I.'s reign, "one's boots and shoes are so long-snouted that we can hardly kneel in God's house."

Another fashion, at once inconvenient and dangerous, prevailed in England during the first half of the present century The Prince Regent, afterwards George IV., had unsightly scars about the glands of his throat, and adopted a mode of dress fitted to conceal them. Stiff black stocks from four to six inches deep were worn by the fashionable men; while stiff shirt collars came out above them, reaching halfway up the cheeks, and often scrubbing the ears severely. Beau Brummel's dress was a fair specimen. See cut of Beau Brummel on page 144 in this book.

Perhaps no part of the human body has been so generally dealt with in an arbitrary manner as the hair, which has been given for its protection. In the Indies, there formerly was a tribe of Cumanans, who plucked off all the hair of their eyebrows, and took the greatest pride in this unnatural depillation. In like manner, the Brazilian females used to eradicate their eyebrows, and could give no other reason than that it was a long-established custom; and who ever knew any practice so absurd or injurious that the majority of women, with many rare and noble exceptions, would not conform to it if it had become fashionable? The most obvious use of the eyebrow hair is to arrest the perspiration, which otherwise might flow down into the eyes and injure them. Possibly, therefore, the practice of eradicating this hair might originally have been the desire of shewing that the lady was above such labour as would produce perspiration. The practice of plucking out the beard and whiskers prevails among the various tribes of Indians I have visited in America. The white man shaves his face, the Chinaman his head (fig. 31). Both practices are contrary to nature, and are rebuked by the consequences which ensue.

The tri-facial, or fifth pair of nerves, with their three branches, are distributed about the face and eyes; the branch which runs to the upper lip, and that which goes to the eye, being connected at the cæsarian ganglion, and then by the body of the fifth nerve with the brain. Hence whatever irritates or exposes the upper lip, as shaving of necessity does, must irritate and weaken the eyes, if not impair the harmonious condition of the entire nervous system, as all are closely connected; whereas wear

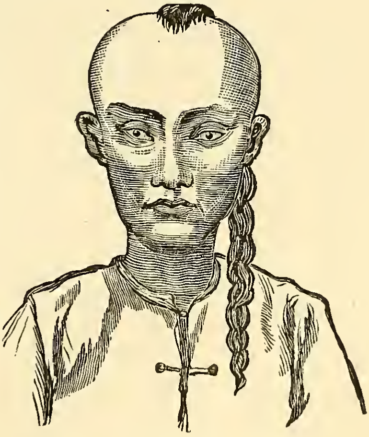


Fig. 31.—A Chinaman, with his head shaven.

ing all the hair that nature has provided for the face strengthens the eyes, as well as protects the throat from cold, better than any artificial muffling. Fig. 32 is the likeness of a man who has constantly abjured shaving, and never had a day's sickness in his life. He resides in San Francisco, California—his name, Captain Staddon. Mark the healthy expression of every feature.

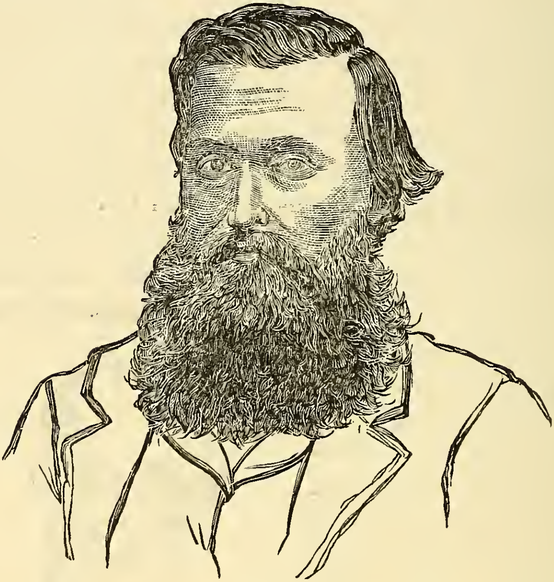


Fig. 32.—Captain Staddon, of San Francisco, California, who was never sick.

As a contrast, Henry Ward Beecher is an example of a shaved and popular man — an example as conspicuous and popular as could be mentioned (fig. 33). He professes to be a follower of Christ, but fails to follow Him in this respect; for the Saviour never shaved, if we may judge from history, and traditional pictures. Nor does Beecher follow the Bible in this matter, for it reads thus:—"They shall not make baldness upon their head, neither shall they shave off the corner of their beard, nor make any cuttings in their flesh," Leviticus xxi. 5. Also—"Ye shall not round the corners of your heads, neither shalt thou mar the corners of thy beard," Leviticus xix. 27; and no man can shave without marring his beard, and, at least, part of its corners.

Beecher may be more properly characterized as a follower of fashion than of Christ or the Scriptures, as he professes to be. Yet he is no more so than thousands of other professors of the Christian faith. "A close shaven priest" has long been proverbial. But if, as we have shewn, the nervous system is injured by shaving, and if, as every one knows, the true balance of the mind depends more or less on the state of the nerves, the mind is likely to suffer by this artifice of fashion; and as the mind is closely related to the soul, this, of course, suffers also, and who can tell whether according to theology the interests of the soul may not be sacrificed to fashion through shaving; and Beecher, by his example, may be damning souls instead of saving them? We shall forbear to pass judgment, and, in this respect at least, be out of fashion. But let us urge upon Beecher to set an example of living in accordance with God's great natural laws, by wearing his beard; also to follow the example of Christ, and no longer thwart the benevolent designs of his Creator. Doubtless, God never made anything—no, not a single hair in vain, or as a useless appendage—and it is presumption in any person to say the beard is useless, or worse than useless, and who will

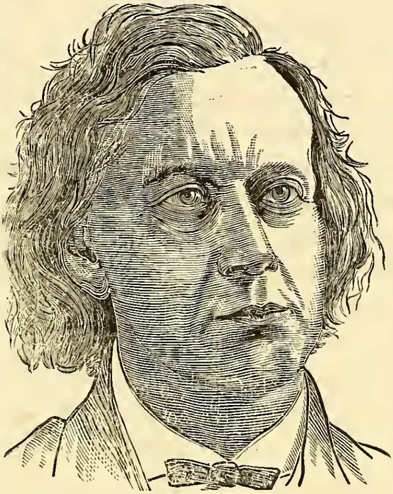


Fig. 33.—Rev. Henry W. Beecher.

utterly remove it as such? Beecher, "take warning," as the Methodists would say, "lest it be everlastingly too late to repent and be saved;" for are you not "a sinner by nature, and far more by practice?"

Our English cousins' fashions with respect to the hair, whether of the head or face, have been extremely changeable, but, on the whole, the shaved face and long hair has been most in the ascendant. So early as the reign of Henry I., we read of the long hair and flowing robes that gave the men a ridiculously effeminate appearance. It is said, that when the king was in Normandy, a bishop preached so eloquently against the sin and wickedness of wearing long hair, that the monarch and his attendants actually wept; and the prelate, resolved to follow up his advantage, took from the folds of his sleeve a large pair of shears, and cropped the whole congregation. Strutt tells us that, in the reign of Henry VII., the hair was parted back from the forehead, and fell in long flowing ringlets on the shoulders; which made the warriors of that day look very effeminate, particularly as the face was divested of beard, whiskers, and moustaches. The despotic Henry VIII. condemned the hair of gentlemen to be cut short, we are told, "to the no small disgust of the gallants of that day, who, however, were a little consoled by the gracious permission of their sovereign to wear a fierce beard and long curling moustaches. This style flourished in the reign of Queen Bess and James I. But Charles set the fashion of wearing a love-lock, which was a curl on the left side, considerably longer than the rest. It became quite the rage, though nothing in the annals of hair, wigs, or periwigs ever caused such commotion among quiet people, and a quarto volume was written against it, in which it is related that a nobleman had his cut off on his death-bed, as a "cord of vanity, by which he had given the devil a hold to lead him at his pleasure." In the reign of the second

Charles, the high curled peruke, or the hair parted in front, and falling upon the shoulders and back in heavy masses of corkscrew curls, marks the climax of this fashion in men.

Up to the end of last century, gentlemen who did not keep valets, were dressed every morning by the barber. The face was shaved very clean, and the hair of the head loaded with powder and pomatum, before being arranged according to the mode, and tied in a pigtail behind. When the hair came to be worn short and unpowdered, gentlemen learned to shave themselves, and dispense with the barber. For many years past, the unshaved face has been more and more prevalent, though at first—that is about thirty years ago—it was, like the short unpowdered hair at the commencement of the century, regarded as indicative of political principles subversive of the existing order.

As for the estimation of the beard in other lands, we are told that many of the religious ceremonies among the Tartars consist in its proper management; and the Chinese devote much attention to the few straggling hairs they can coax to grow on their chins. The Russians used to wear enormous beards; the Czar Peter ordered shaving, but could obtain no obedience, until he appointed officers to cut off the beards of his refractory subjects by force. Perhaps his motive was the same with that of Alexander the Great, who ordered his Macedonians to be shaved, lest their beards should afford a handle to their enemies. The Romans grew their beards to mark any great sorrow; the Greeks, on the contrary, shaved theirs in times of affliction only, until the time of Alexander. Since the introduction of Christianity to Europe, the Greek and Romish Churches have waged bitter war on this point; the former enforcing the long beard, the latter enjoining close shaving. Among the Mahommedans it is considered a sin to cut off the beard, when once it has been allowed to grow, as they say, "the angels dwell in them." The young men of Persia, Mr. Morier says, sigh for a beard, and grease their chins to hasten its growth, because, until they have a respectable covering there, they are supposed unfit for any place of trust.

The general sense of mankind has been that, if a woman have long hair, it is a glory to her, the abundance of this ornament tending much to soften the features. But here again fashion is arbitrary and tyrannical. Until about the commencement of the present century, ladies wore their hair powdered, and dressed high on the crown with cushions. The powder imparted considerable softness to the countenance. Next, the mode *de rigueur* was a profusion of curls hanging round the face—doubtless a most becoming fashion. But when Queen Victoria ascended the throne—whether it was owing to her good sense and worthy taste—or whether it was simply to economize time—she introduced the fashion of braiding plainly in front, and gathering into small compass behind the head, shewing, in fact, as little hair as possible, and that dressed in the simplest manner. But the Empress Eugene had a face of such contour as to require no braids; she drew her hair back to display it; and ever since we have had a bare-faced age of women; the hair which, hanging over the temples, would have softened the features, and concealed any irregularity of contour, is gathered to the back, and with the addition of much that is artificial, and a great deal of trumpery besides, it is formed into as large a mass as it is possible to produce (fig. 34).

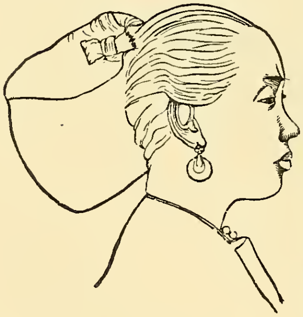


Fig. 34.—Fashionable head-dress of America in 1860.

Among savage nations, little skilled in the arts of dress, there prevails more or less the custom of tattooing or painting the body, either in part or over the whole surface.

Herodian describes the Picts of North Britain as people who painted their entire bodies, and from this circumstance obtained their appellation from their more civilized neighbours. The North American Indians are accustomed to paint their bodies after all manner of devices. Here is a likeness of one marked with white stripes round the body and across the face, as I had his photograph taken in California when he was in full trim on the occasion of his annual war-dance (fig. 35).

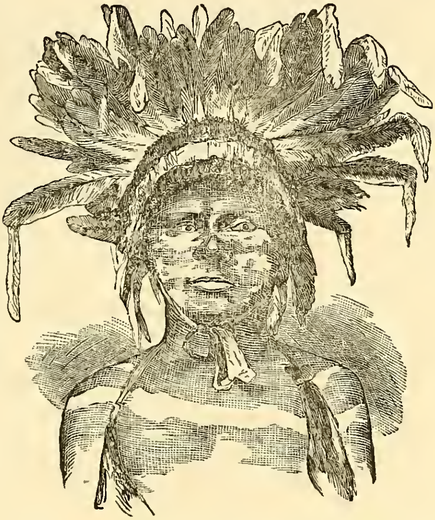


Fig. 35.—A Digger Indian attired for an annual war-dance.

Here is an example of a North American Indian, as his body is painted for the chase; shewing how fashion may lead a tribe or people to low animal imitation (fig. 36).

We are told that the ancient Samians were accustomed to burn letters into their foreheads, whence Aristophanes calls them *populum literatum* (fig. 37).

A curiously deforming custom prevails among the Digger Indians of California. A widow covers half of her face with the ashes of her deceased husband's body, mixed with pitch, and continues to carry this disfigurement until through time it naturally wears off. The appearance is well indicated in fig. 38 of a female Indian of California. Doubtless the idea whence this fashion originated was, that a widow ought not to form a new connexion until the lapse of a decent length of time; and this was best secured by rendering her unattractive, at the same time indicating pretty distinctly how soon advances might be made. The widow's caps, which are now made in a becoming Queen Mary shape, and may be doffed at any time, are nothing to the pitch and ashes composition for keeping men at unmarriageable distance.

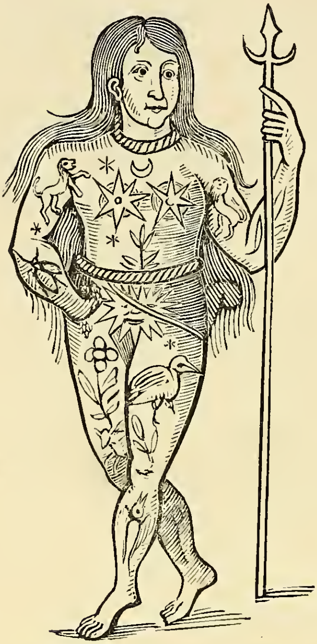


Fig. 36.—An Indian of Arizona.

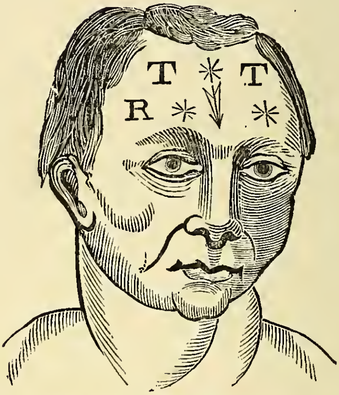


Fig. 37.—A Samian Man.

Patching the face over with small pieces of black silk, of various shape, came into fashion in England about the middle of the seventeenth century, imported, it is thought, from Arabia.

The maiden of sixteen and the gray-haired grandmamma, covered their faces with these patches, shaped like suns, moons, stars, hearts, crosses, and lozenges. A writer in Queen Anne's reign says, he observed one set of ladies having their faces spotted on the right side, while those in the opposite boxes had their patches on the left; and in the middle boxes were ladies patched on both sides. On inquiry, he learned that the first set were Whigs, the second Tories, and the third were neutral in politics. It is said that the influence of Addison's writings chiefly were successful in banishing patches from England.

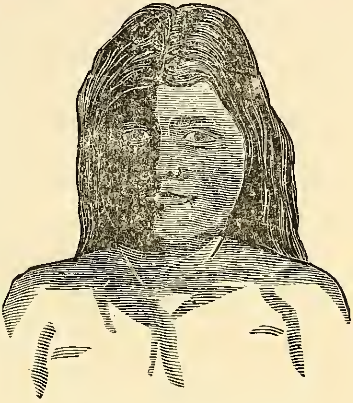


Fig. 38.—A Digger Indian of California.

Enough has been said to shew that every portion of the human frame has been deformed by the caprices of fashion at some time and by some people. We might remark on some arts which are used, not to mar the natural beauty, but to supply it where deficient. A fine white skin, with roses blooming on the cheeks, is undeniably beautiful; and consequently, in most of the large cities of Europe, there are females whose occupation it is to prepare ladies for appearing in full dress by enamelling and rouging the skin of the face, neck, and arms. But such appliances are very deleterious, corroding the tissues, and preventing the natural flow of perspiration through the pores. The same may be said, though in a mitigated degree, of the use of what is called face powder, by the manufacture of which a perfumer in London has made a large fortune. Freckles are so derogatory to female beauty, that a lady may be forgiven for seeking their removal; and we append a recipe that will take them away if they are removable,—

℞. Oxalic acid, x. grs.
Essence roses, x. minims.
Aqua pura, xii. ℥.

Mix—and moisten the freckled parts of the skin twice a day with a sponge or cloth saturated with the mixture. If the freckles are not removed in four weeks, cease to use the wash.

Pimples on the face are likewise ugly, and even more displeasing to the eye. The practice of washing the face more frequently than the rest of the surface will produce them, by drawing the blood to that part, to leave its impurities there. Some years ago, a young minister descended from the pulpit extremely warm, and in his impatience splashed his face abundantly with cold water; the result was a crop of pimples, which were not easily removed. Whoever, therefore, is subject to this disfiguration should freely wash all the rest of his skin, and the face more sparingly.

Let us now note some of those fashionable customs that operate indirectly on the human frame to its injury. Such are the use of alcoholic liquors, of tobacco in its various forms, of opium, and even tea and coffee, all which, by their operation on the nervous system, tend to debilitate the individual, and mar the beauty of the race. Indulgence in strong drink causes the under eyelids to puff out, and eventually to

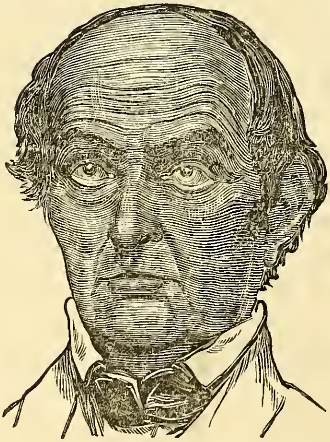


Fig. 39.—Hon. Daniel Webster.

fall outwards and downwards away from the eyeballs, as the result of nervous and muscular exhaustion. See cut (fig. 39) of Daniel Webster, who drank to excess. This engraving was made from an ambrotype taken from life. The weak and congested under surfaces are thus exposed—an unsightly appearance which ought to act as a warning to those who may yet be saved from exhibiting it in their own persons.

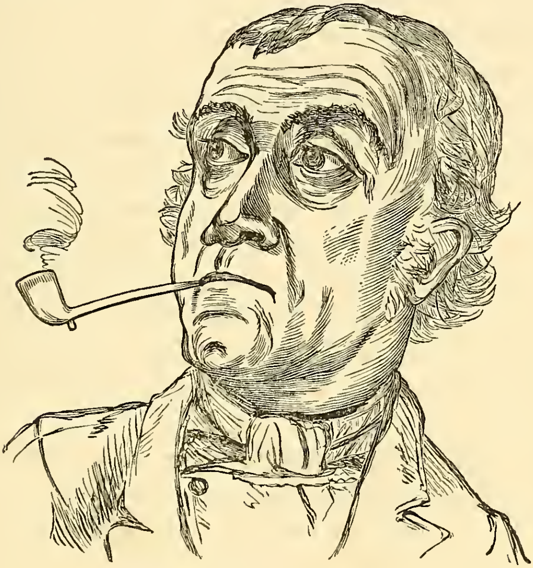


Fig. 40.—An Irish Peasant.

Tobacco is another nerve stimulus, used in this country chiefly in the way of smoking and snuffing, but in America, largely by chewing and dipping also. Some readers may not even know what is meant by dipping. Some ladies of the Southern portion of the United States carry a box of snuff with a stick terminating in a kind of brush. This they moisten and dip into the snuff, then rub on their teeth, and suck into the mouth. It is simply a lady's approach to chewing "the fragrant weed." This tobacco chewing, besides being a filthy practice, which none of the lower animals debase themselves with, is highly injurious to health. It excites the salivary glands, which are situated in and around the mouth, and are six in number—two parotid, two sub-maxillary, and two sublingual. These when excited, as by dipping, chewing, or smoking tobacco, will pour their saliva into the mouth. This saliva, being largely mixed with tobacco, is unfit to be swallowed, and is therefore ejected in spurts upon the carpet, into the fire, or anywhere that happens. But nature requires this saliva to turn that which is starchy food in the mouth into grape sugar, and fit the edibles for the gastric juice of the stomach. The waste of it by spitting, therefore, causes the alimentary canal to do its work feebly and poorly; thus the blood comes to be insufficiently replenished, which leaves every part of the organization in an enfeebled condition, and more susceptible of disease and death. If this does not mar the beauty of the individual who indulges in it, it causes the offspring to be smaller and weaker than would otherwise be the case.

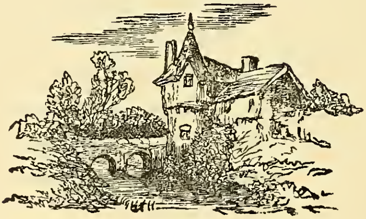
American and European girls chew a sort of gum, compounded of several substances, no way pleasant to the taste. The custom can be accounted for only on the supposition that, through the tobacco-chewing habits of their fathers, these girls have inherited a tendency to keep their jaws working. But gum-chewing has in a lower degree the same baneful effects as tobacco, through the undue excitement and waste of saliva.

Snuffing excites the olfactory nerve, which is distributed to the nose, and gives rise to the special sense of smell; and this excitement being reflected over the entire nervous system, becomes an occasion of weakness to the mental faculties; for the mind bears the same relation to the bodily organs, that a river sustains to its tributories: its size and force are just in proportion to the strength of its feeders. Tobacco has always thus enfeebled the mental and physical powers of those who used it, and is going on to weaken the generations that are to follow; and that must enter those great battles of life in which feebleness is left behind, and strength wins the jewel of success.

American ladies complain, not without reason, of the filth bestrewed in their rooms through tobacco chewing. Scarcely less dirty is their own practice of trailing long dresses in the streets, and carrying to their homes whatever they wipe up. This prevailed in England several years ago; and I know a gentleman who, in the hurry of business, trod on such a skirt and tore it from the corsage; but quickly appeased the rising of the fair one's wrath, by acknowledging that he knew he had broken the law by stepping on a train in motion. Long trains, though still fashionable in the drawing-room, are quite exploded for out-of-door walking in civilized Europe; insomuch that in my extensive travelling through England, Scotland, Ireland, Wales, France, Prussia, &c., I have seen but one lady wearing a trailing dress, and she, I was informed, was probably a questionable character.

Tea-drinking is another means of producing nervous excitement, and has been so largely indulged in by parents, that their children have been born with a hereditary tendency to desire some nerve stimulus; and thus are thousands marked as drunkards, or smokers, or chewers, through practices which their parents little dreamed would have such an effect. Tea contains a poison called theine, which gradually collects on the nerves and brain, and tends to render the whole sensory system unfit for its proper functions. Hence God is thwarted in His designs by a cup of tea. But those who use it shelter themselves, like the dram-drinker, with the plea that "it makes me feel better." Coffee contains a large quantity of caffeine, which is a poison, and acts in the way of thickening the blood, thereby retarding mental action, and causing general stupor, with a tendency to apoplexy. Coffee proves most injurious to fleshy people, and tea to those who are thin and have large brains.

Whatever is untrue to nature, and injurious to any part or function of the body, rest assured that the Creator never intended it for your use, and that it will mar the work of His hands in yourself and in your offspring. Fashionable it may be; but at the beginning of a fashionable life is sin, in the middle of it a weak mind, and at the end the graveyard.



SIGNS OF INTELLIGENCE IN MEN AND ANIMALS.

THE surfaces of everything we see possessed of growing powers, bear great and unquestionable marks of the intellectual. Trees, rocks, grasses, fish, reptiles, birds, vegetation and, indeed, all things animate or inanimate, are stamped with the indelible proofs of intellectuality. Nor can such evidences very well be passed over by the observer, more especially if his perceptions be keen, or his love of natural phenomena sufficiently ample to warrant an investigation of this assertion. For instance, different degrees of intelligence exist in various forms. Hence, in some departments of life, we perceive great powers of sagacity, while in others, of the more cold-blooded species, we observe doltishness, and, might we not add, with a plainer if not more terse meaning, utter stupidity.

Now, the faculty of discerning at a glance what animals and men are intelligent, or, on the other hand, to select from the masses those that are weak-minded, is a knowledge of the utmost importance to every enlightened reader and, indeed, a subject well worthy the consideration of the philosopher, the study of the oracle, and, add to this, if you will, the wisdom of a Solomon.

The main features by which we may distinguish the intellectual powers of men or animals, we here definitely describe, and illustrate according to the following rules:—

Prominent and well-arched eye-bones, with quite a deep indentation beneath the brow, that is, across the top of the nose and eyes, slight depression crossing the forehead (three-fourths or a full inch above the eyebrows), also a perpendicular depression commencing at the top of the nose, and extending to the centre, or nearly so, of the forehead.

Such characteristic signs, for the guidance of the observer, are never seen upon men, unless they be to distinguish them as possessing the most intelligent and comprehensive intellectual qualities, which in inferior animals are not exhibited so largely. Yet, there are some of the latter that may bear a worthier and more direct comparison. For instance, take a very intelligent pointer, or even poodle-dog, and you will observe the markings as foregoingly described, strikingly distinct and strangely analogous to the more intellectual man.

Then, again, another proof of the correctness of our theory between the intellectual and the unintellectual, is the bear. This latter animal, though endowed with great strength, and, indeed, we may say, almost unexampled ferocity, is the reverse of intelligent or even tractable. For the most accurate index to his physiognomy, observe his eye, which is on a level parallel with his forehead. You perceive no deviating marks there, no protuberances that we find in the more intelligent order of animals; but the contrary—a perfect plane of forehead and nose, as they form, or nearly so, a straight and undeviating line from one feature to the other. Take the eye again, in contrast with the most intelligent of the lower animals, and it has the appearance. if we might use the expression, of being set in a plane board.

The hog, opossum, rhinoceros, and snake also shew a level between the eye and the forehead, which shew them the most unintellectual, ferocious, and stupid of the animal creation.

The ox, on the contrary, is an animal with greater capacity, and, of course, more nobility and docility than any of those we have last mentioned. Mark the physiognomical difference of this animal. It displays a depression across the head, just above the eyes, and exhibits rather prominent eyebones. These marks, so emblematic of the intelligence of the ox, are invariably to be found in the more intellectual of mankind, which, once placed and established there, can never be wholly eradicated. Hence, we draw a line of demarcation betwixt the lower and higher grade of the animal creation, by the assistance of which the intelligent reader may easily draw correct inferences for himself, and, indeed, solve mighty problems which were before to him buried in darkness and oblivion.

Another word ere we close the subject of the present article. When you observe in either man or woman the eyes jutting out, or otherwise marked very prominently in their sockets, the nose forming a complete bridge in alignment with the lower part of the forehead, with no deviation or protuberance between the two, rest assured of perceiving in that person a preponderance of strong animal passions, with feeble susceptibilities of improvement. Such people may for the time be weaned from their grosser animalism by the more vigorous intellect. and propelled into courses of research and study; but they will eventually revert to the baser gratifications of their truer instincts, which, alas! are too sternly depicted in them, ever to warrant a permanency of reform.

Intellectual excellence is not to be cultivated in a week or a month: it requires years of unswerving stimulus, during the growing period of childhood, to form the true intellectualist. Neither can the work of a few courses at seminary, academy, or college unfold and form the riper judgment of vigorous manhood. It is only by continuous application that we attain solidity, and gain a more enlarged compass of thought for ourselves.

ORIGINALITY OF MIND.

As in a great mountain chain a few lofty summits arrest the eye, towering far above the average height of the range, so here and there in the generations of men we mark those whose superior genius has placed them on high, and made them predominant among their fellows. It is the lot of a few, and only a few, to be the first producers of thoughts calculated to give them extensive influence over the many who have no originating power, and can only receive and follow the ideas of others. Why are the names of Galileo, Descartes, and Newton so conspicuous in the annals of science? Because they were the first that dared to discard the commonly received theories, and seeking to deduce principles from facts, made such discoveries of the great laws of nature as no one had thought of before. Why are the plays of Shakespeare, though now near 300 years old, still regarded as masterpieces throughout Europe? Because, departing from the beaten track of dramatic composition, he became so true and subtle an interpreter of the human soul as has never written before or since,—originating hosts of characters and pictures of life from his own inexhaustible imagination. We might as well ask why all the cattle in a herd follow one, or why hundreds of wild geese follow a single leader, as enquire why some men think for the million, and the million adopt their thinkings. It is a law of nature that the strong lead the weak, and the weak follow the strong. To be the orginator of a thought is the exception, to receive the thoughts of others is the rule. If one large tree among smaller ones in a forest goes crashing to the ground, it is likely to overthrow many of the weaker ones in its fall. When a massive boulder goes thundering down the mountain side, many lesser rocks and stones go rattling after it; but it is the larger, heavier, and more powerful mass that leads the way, and by its superior force detaches and brings jingling down the quiet rocklets that otherwise would have kept their places. Whole communities of men will remain stationary and unprogressive, pursuing the even jog-trot course that their fathers and grandfathers did for ages, until some thundering voice rings out a terribly new and daring plan of action. When Leonidas led on his brave band of warriors, it was from the strong and fearless leader that they caught the first inspirations of battle and aspirations to victory. Napoleon the first would never have made himself master of Europe but for his personal influence over his soldiers, inspiring them with confidence in his leadership and enthusiasm in his cause.

Let us consider what are the outward marks and tokens whereby this strength of character, this capacity for influencing others, may be discovered. In all great discoverers in science, all inventors in art, all leaders in politics and war, we observe large features; and hence draw the conclusion that such features are true indications of strength of character and originality of thought. In no picture of Shakespeare handed down to us is there a single feature small or feeble looking. The rugged features of Dr. John Hunter, one of the most independent thinkers of any age, would convey without fail to a Physiognomist that he was born to influence, and not to be influenced. Professor

Morse, the inventor of the Electric Telegraph, possessed very large features; his mouth was capacious; his nose towering, and remarkably prominent; the more deliberately one studies his face, the more one discovers strength in every feature of it. Few artists have excelled in originality of composition the rugged-looking Michael Angelo, whose cartoons became models for all Europe, and created a new era in art. A similar example is presented in Christopher Columbus, whose discovery of the western world has led so many thousands of Europeans to make it their home. Peter Cooper has an enormous nose; other features strong; and manners so peculiar, that no one would take him for anything but a singular genius. He laid the foundation of one of the most originally planned schools in America, and was the prime mover in getting it established.

On the other hand, small features generally bespeak small minds, and characterize those dependent beings whose vocation it is to follow not to lead. Children usually have small features. Almost all their acts are imitative; and their thoughts and feelings are for the most part easily moulded by those elder persons among whom their lot is cast.

Among animals, apes and monkeys are recognized as the most imitative; that is, they do, of set purpose, mimic the actions that they witness; but for an example of servile following, with apparently no independence or power of self-direction, there is perhaps no animal like the sheep. And here we have a face small in proportion to the body, moveover, with very little distinctness or prominence in its various parts. We are told that a shepherd knows each individual sheep among hundreds or thousands. If so, it is only the shepherd. No one else can easily learn to distinguish one sheep from another. There is no such close resemblance among horses, cows, deer, dogs, cats, even pigs, or any other animals that man has domesticated; and there is no animal that follows its leader so implicitly, and with such appearance of stupidity, as though the creature durst not think for itself. The leader is usually one of the coarsest and most vigorous of the flock; if he breaks over a fence or parapet that separates the road from a precipice or the bridge from a river, the whole flock will follow to their utter destruction. We are told, too, that if a sheep gets astray, it has no sense to find its own way back to the fold; but goes on in one direction until found and turned by the intelligent shepherd or dog.

Thus is society influenced in all its departments by minds capable of governing and controlling the majority of mankind, like sheep following their leaders, without question or scruple. Yet there are many gradations in this servility. Students of science embrace the leading principles of the schools to which they belong, but many of them investigate for themselves, and seek to add new truths to the store already accumulated. Mechanicians are ready to worship the great inventors to whom they are indebted for the primary movement in a particular direction, but countless are the improvements and varieties of application originated by men of no great mark. It is in matters of religion and politics chiefly—in which many take more or less interest, but to which few devote themselves wholly—that this servile imitation is most conspicuous. Millions are following the ideas taught by Confucius when he walked the earth 2,400 years ago. The Presbyterians dread any deviation from the views of Knox and Calvin; the Methodists follow and quote Wesley as an indisputable authority; and the Quakers stick to the principles of Fox and Penn in the same imitative manner that Phrenologists follow in the wake of Gall and Spurzheim; and Homœopathists in that of Hahnemann. But every spiritual pastor has his flock; people that accept everything he says, try to do everything he prescribes, and never dream of thinking for themselves in matters either of faith or duty. Too truly did Pollock say,—

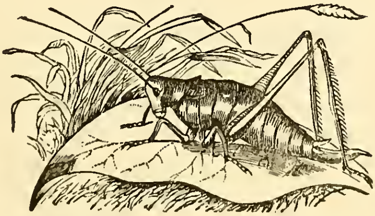
> "Vanity to be
> Renowned for creed eccentrical, devoured
> Its thousands; but a lazy, corpulent,
> And over-credulous faith, that leaned on all
> It met, nor asked if 'twas a reed or oak;
> Stepped on, but never earnestly inquired
> Whether to heaven or hell the journey led,
> Devoured its tens of thousands."

So in politics. We wonder not that the Americans appreciate the genius of Franklin and Washington; but thousands of fairly intelligent citizens cast in their annual or quadrennial votes for those who are to govern them, without a thought as to their respective merits, simply following where the way is pointed by the *New York Tribune.* Multitudes of voters more are moulded for each election by the *New York Herald*, and have not a political opinion but what is derived from it; while the Democrats in the United States stick to Jackson, and, it is said, that in eastern Tennessee, some people vote for him still. So do the millions follow, not examining whether the road is right or wrong; and so, like sheep, they may be led either into green pastures, or to the slaughter-house.

Having been a public lecturer for several years, I have had a fine opportunity of observing this disposition to lead and be led, even in the matter of whether the lecture shall be patronized or not. Many a man have I seen come to the door of the hall, and inquire "if any one is in yet." When he sees a dozen come in with an eager rush, the poor sheepy rushes too, and looks as eager and in earnest to hear as any of them.

I have seen among the hills of California a team of fourteen mules drawing one waggon. Perceiving the front mule wearing a bell, I asked the teamster what was the use of it, and he said it made them start at one moment and continue pulling together; otherwise they could not instantly know when to stop or when to go on. So do the majority of mankind walk as the leading bell tinkles.

All civilized nations abjure despotic governments, and the more enlightened any people become, the more independent in thought and indisposed to servile following. The people of America have adopted Independence as their watchword, and an instance of the free and independent spirit was displayed by the youths of Boston in the times of the revolution. Some English soldiers had knocked down the snow houses that the boys had carefully erected, and had broken the ice in their skating ponds. The boys complained to the captain; but he only laughed at them. The undaunted little fellows, however, knew the difference between fair fighting and capricious tyranny; they went to the commander and related their grievances with such boldness and manly freedom, that the general, far from resenting the audacity of the appeal, was heard to say that freedom was in the very air of the country, breathed even by its boys. Would that the minds of all the English, Scotch, Irish, and American people of the present day were freed from the bigotry and superstition that makes mere imitative sheep of so many. What advancement and glorious happiness might all enjoy!



MENTAL LABOUR.

> "Deep on his front engraven
> Deliberation sat, and public care."—MILTON.

ALL totally uncivilized nations are characterized by a deep-seated aversion to arduous and persevering labour, whether mental or physical. A savage people displays scarcely more inclination for the steady pursuit of agriculture, or of the simple manufactures of which it is capable, than for invention and study; but, as the national mind develops, a taste for the physical, and subsequently for the intellectual industries begins to display itself, and a dawning civilization glimmers upon the race. The further progress of this civilization is marked by a growing distaste for purely manual toil, which expresses itself in the invention of labour-saving machines, by means of which one man does the work of ten, or a hundred unaided hands.

It is the fashion for a certain class of philanthropists to decry machinery as prejudicial to the working man; yet it is obvious that if, with its assistance, a people, considered as a whole, can produce as much by working one hour *per diem*, as they formerly did by working ten, the machinery has given them nine leisure hours a-day; and if these leisure hours are still employed in other equally productive industries, the total produce of the nation will be increased tenfold; in other words, there will be just ten times as much for it to eat, and drink, and waste, as there was before the machinery was introduced. It may be said, however that, in point of fact, the labourer is not ten times as well supplied as before, the increased national production being consumed by the capitalist in luxurious living and prodigal waste. This assertion is not entirely without foundation. Capitalists, it is not to be denied, do sometimes make excessive profits upon the money they have invested in the support of labour; yet it is equally true, *first*, that the worst-conditioned labourers are comfortably housed, and clothed, and fed, compared with machineless, *i.e.*, savage people; and, *second*, that the principal misfortunes of the labouring class arise from their fixed indisposition to that mental labour, by means of which it is that capitalists have chiefly contrived to accumulate wealth, and thus to better their condition. Even in a country where labour is as ill paid as in Britain, it is in the power of workmen who exercise thrift and foresight, to save enough in ten years from their earnings, to engage in some co-operative industry These co-operative industries are evidently the salvation of the working man, since, by means of them, he can not only enjoy the ordinary profits of the capitalist, but can increase those profits by that enthusiasm in production which he never experiences except when he is working for himself. These and similar considerations have been frequently presented to the working class, but they prefer to pay enormous dues to the internationals, and to spend their lives in hardships and in inflammatory complaints against their so-called oppressors, to that mental labour, and forbearance in the use of accumulated savings which is a necessity with the capitalist.

It is a very common error with manual labourers to stigmatize those who live by their minds as idlers, unproductive consumers, &c.; the fact is, however, that without somebody to *think*, no one would know how to *act*. Every thought, moreover, is the result of some physical force expended in its production, and an act of recollection or conception is often attended by a greater physical waste, than the swinging of a scythe or the raising of a mallet. The close dependence of the mind upon the physical health shews us the necessity of guarding the latter, if we would enjoy intellectual power. Many children, at the very time that they are accounted slow and stupid, are developing a strength of physical constitution, by the support of which they may afterwards attain to eminence. They are like those large green apples which, in the early fall, are hard, sour, and uninviting, but which, after they have been fully mellowed by time, are the most sought and appreciated. Natures like these develop slowly by a law of their being, which no amount of corporeal punishment or artificial stimulations can safely reverse. Like the budding flower, they may be bruised and mutilated by improper treatment, but they will not unfold their perfect proportions until the voice of nature calls from without, and responds from within. In spite of this fact, children are constantly urged to an unnatural exercise of their nascent powers, which is a positive and sometimes fatal injury to both mind and body. Every one is ready to admit that a calf cannot be made an ox by feeding or goading, but must wait the slow, maturation of time; yet the principle which underlies this fact is constantly overlooked in the education of children.

When the precious gold is first brought from the mine, it is often less sparkling than mere iron pyrites; but after it has been duly refined, polished, and shaped, it will make a valuable coin or a magnificent ornament. Education is to the young mind a similar polishing process, but much of it is to be gained outside the schoolhouse—in the play-ground, and the broad fields, and in the close observation of nature. The greatest and most successful geniuses in natural science have been those who were the most diligent observers of natural phenomena.

The constrained positions which scholars are forced to take, and the impure air which they generally breathe, often convert the school-houses into veritable slaughter-pens, where countless innocents are murdered every year. As a rule, country life is most favourable to the mental as well as physical well-being of children; for a certain amount of solitude and communion with nature seems to be as healthful to the mind as are fresh air and food to the body. The life of the crowded town may, by its innumerable stimulations, sharpen the mind in certain directions, but it also militates against its breadth and originality by the accumulated weight of public opinion and example. On the other hand, the broad prairies, flowing rivers, and majestic or beautiful scenes of the country expand the "holy germ," and prepare it for a long, noble, and healthful life.

The white race, being the most advanced in civilization, is peculiarly marked by a taste for mental labour. In Europe or America, the most ordinary house with its furniture is replete with indications of taste and invention, as well as of mental toil. The pyramids, on the contrary, though their massive structure has preserved them for ages, exhibit, in their almost total lack of convenience and ornament, a strong preponderance of the physical over the intellectual energies in the people who reared them.

It is a mooted question, which has attracted peculiar interest, whether the finest type of physical organization may not be the result of uniting the more intellectual and nervous races with those comparatively deficient in mental power, but with rich physical endowments. Agassiz fails to perceive any injurious effects from such a combination, but certainly the Caucasian and African miscegenation, which has been practised in America, has not resulted in the production of an ideal race. The Mulatto is acknowledged to have less physical endurance and generative power than either the Negro or the Caucasian, and although more clever than the black, is less intelligent than the white man.

The signs of an inclination for mental labour are a high brain, particularly when joined with small bones and feeble muscles; a glistening and animated eye; great length of the head in front of the ears; and well-defined nasal bones. No man with a low African nose is naturally inclined to mental effort.

The habit of intellectual exertion readily develops an inclination for this kind of labour, especially when the mind is exercised upon congenial subjects. Aristotle's rule, that physics should be studied first, and metaphysics afterwards, is a correct guide to the student, because it follows the natural development of the taste. Common schools are undoubtedly the glory of any land; and yet, like all great institutions, however beneficent, they cannot be operated with perfect adaptation to every individual. That feature of the public education which forces all the children to acquire exactly the same amount of science, history, and philosophy, while it develops in many minds an inclination for study, discourages a taste for it in others, by keeping them chiefly employed on uncongenial tasks.

We are told by the poet that—

"Self-love is not so vile a sin
As self-neglecting."

Let us, then, give to these minds of ours a thorough and judicious training, knowing that—

"A soul without reflection, like a pile
Without inhabitant, to ruin runs."

THE LOVE OF MENTAL PLEASURES.

> "My mind to me a kingdom is,
> Full of rich thoughts."

EACH of our faculties has its own peculiar enjoyment; thus curiosity, which, though sometimes pragmatic and trifling, is often useful and sagacious, delights to search out some new thing; deductiveness finds happiness in the exercises of logic and the excitements of debate; physiovalorosity hastens to combat and exults in victory; factimemoriativeness is pleased by retaining the knowledge of past ideas and events; appetitiveness is pleased with rich and savory viands; amicitiveness is gratified by acts of personal kindness and the society of those whom the heart holds dear; æstheticalness is enraptured with impressions of beauty; ordinimentality finds its Eden in the systematic arrangement of thoughts; huntativeness takes delight in the chase; and demolitiousness enjoys an Elysium in acts of subversion, demolition, and slaughter.

The pleasure which we take in those of our powers which are distinguished as mental, in opposition to the emotional or physical propensities, is not *merely* a pleasure, it is of inestimable *use* in stimulating intellectual exertion, and it is also the most trustworthy guide in the choice of a profession. There are very few cases in which it is not the wisest course to follow those occupations which afford us the greatest enjoyment, for a mental taste is almost invariably accompanied by a corresponding talent.

It is often said that physical enjoyments bring speedy satiety, while the pleasures of the mind are "free from cloying." The fact is, however, that a kind nature has affixed enduring satisfactions to the moderate use of the physical, as well as the mental powers, and that in the one case, as in the other, abnormal and intemperate gratification will occasion impotence and disgust.

"Much study," said that wise old king, who had exhausted the learning of his day, "much study is a weariness of the flesh . . . and he who increaseth knowledge, increaseth sorrow." Solomon, like the ennuied philosopher who is the hero of Gœthe's most thrilling drama, had pushed his investigations to that point that his wearied mind grew disgusted with further searching. But disgust is not all; softening of the brain, insanity, failures of special faculties, like attentiveness and factimemoriativeness, and a great variety of nervous affections, are often the result of an undue indulgence in mental pleasures. The abuse of any power, physical, emotional, or intellectual, is a sin, and, as such, brings its own punishment. Those who take good care to keep out of that hell in this world, which is the retribution of all kinds of intemperance, need have no fear of a future perdition.

But while the excessive use of our mental faculties is a frightful evil, their legitimate exercise is the source of some of our most elevated enjoyments. The "ample page of knowledge, rich with the stores of time," affords exhaustless satisfactions to the temperate, yet devoted student. Neither love nor ambition ever won a more enthusiastic and heartfelt tribute than that which the poet pays to the pleasures of the mind—

"My inheritance—how wide and fair—
Time is my estate—to time I'm heir."

As the spirit transcends the body, so are the ineffable transports of the intellect superior to mere physical pleasures. Imagination lends enchantment to the solitude of the ocean strand, and memory crowds the most tranquil scenes and the most idle hours with busy recollections of the past.

It is worthy of consideration that intellectual enjoyments are cheap, as well as elevated. "The gods sell all things at a fair price"—nay, there are many things which they offer us gratuitously. All that is needed is the mental activity to appropriate the food for reflection which they present to us on every side.

That pyriform contour of the face which is given to it by its being large at the top and small at the bottom, indicates in the possessor a love of intellectual pleasures. When the face is about equally broad above and below, the person may, by a careful system of education, develop a considerable degree of enjoyment in mental exercises. The man who is self-cultivated may be known by his keen and sparkling eye, his clear forehead, his closed and rather compressed lips, and his regular and graceful carriage.

"Mental pleasures," said Colton, "never cloy; unlike those of the body, they are increased by repetition, approved of by reflection, and strengthened by enjoyment." Those who participate in these supreme satisfactions have the rare appetite "which grows with what it feeds on," and theirs is the supersensuous music of those "sweet airs which give delight and hurt not."

FORCE OF CHARACTER.

"He doth bestride the narrow world
Like a Colossus, and we petty men
Walk under his huge legs."—SHAKESPEARE.

In the practical concerns of life, success is oftener the result of force of character than of great learning, polished manners, or moral purity. "I have not learned," said Themistocles, "to tune the harp or handle the lyre, but I know how to make a small and inglorious city both powerful and illustrious." There are some men who are the natural masters of their race, who, by reason of their quick insight, rapid decision, fixed purpose, and energetic will—

"Get the start of the majestic world,
And bear the palm alone."

Since such as these are born to govern, it is well for the happiness of mankind that the much larger class, who are born to be governed, usually take pleasure in their subordination. Those who are not gifted with force of character find the occupations and responsibilities of the ruler an insupportable burden, while service and discipleship give them a pleasurable field of activity. The inequalities in worldly distinction, which are so often complained of as the mere freaks of fortune, are really the result of inequalities in those characteristics which secure distinction. As Cassius has it,—

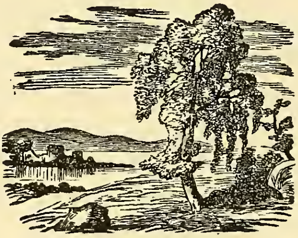
"The fault, dear Brutus, is not in our stars,
But in ourselves, that we are underlings."

And yet, since the noblest qualities of mind and heart are not always those which achieve success, it may well be questioned whether what is called prosperity is not sometimes purchased at too dear a price. It were better to enjoy the respect and esteem of a very small circle, than to be the corrupt and corrupting master of half the world. Yet, although force of character may be so perverted in its using, as to be the agent of dishonour and crime, it is, when properly directed, a superior excellence.

Those persons who have fine and symmetrical features, though they may possess good sense and amiable feelings, are never the foremost men of their time. They may be clever, industrious, and friendly, but they are not—as the foremost men always are—formidable opponents; they do not make those whom they displease fear to shew their displeasure.

Those persons who have large chins, prominent noses, and capacious foreheads, together with sound health, and a good brain and nerve form, are the truly forceful characters who always succeed in cutting their way to fortune. The large chin denotes a strong constitution; a prominent nose evinces energy; while the expansive brow indicates great sensational and cognizant capacities, which can so direct the energy as to make it commanding. Those who have stirred the world by their burning eloquence. or filled the page of history with the recital of their daring deeds, or noble acts of humanity, have possessed the chin, nose, and forehead above described. Napoleon and Wellington—both distinguished as the leaders of great armies—were strongly characterized by these features, and none have occupied a larger or more distinguished place in modern history. Such men are impressive, and act with a confidence of power which gives a mastering fascination to all that they say or do. The physiognomical signs of force of character do not vary, whether it is displayed in political leadership, in commerce, by the successful management of vast establishments and the acquisition of enormous wealth, in public speaking, literature, or, in short, in any department of human life, where individual power can make itself felt.

The want of impressive force has robbed many an orator of the meed of praise, when his discourse was not without reason, imagination, and learning. On the other hand, the possession of this force gave charm and weight to every word which fell from the lips of Chalmers, Brougham, and Webster. The writings of Samuel Johnson and John Locke are peculiarly distinguished by their vigorous diction; and both these men possessed the three signs of force of character which have been given in this chapter.



DECISION OF CHARACTER.

He who has mastered the make-up, or construction of the human system, in its adaptations, proportions, and the laws by which its various faculties are governed, is possessed of the means by which unerring conclusions may be formed with reference to the character of any man he may chance to meet in the varied walks of life. He knows how very intimately body and mind are related, and how much the healthy action of the latter depends upon the form, construction and development of the former; and as the meteorologist discerns the face of the sky, and by an induction of observed facts predicts storms, &c.—so he having mastered human Physiognomy, will rarely fail in his conclusions as to the moral idiosyncrasies of the members of the human family with whom he comes into contact. That this power of character-reading would be of immense moment to society, who can doubt? Its necessity is illustrated every day in the columns of our newspapers. Young men gain the confidence of employers, are put into situations of trust, keep their eyes about them, and the first opportunity they have of lining their pockets with money they have never wrought for, they yield to their peculiar desire, possess themselves of the money and abscond; and all that the astonished master can say is. that he has been deceived. Now, had that master studied

Physiognomy, had he been able to read the signs of the human system, he would in that case have been careful to see that, so far as lay in his power, no temptation to dishonesty came in the young man's way. We do not mean to say that young men with tendencies to cleptomania should not be employed, but certainly, not only for the benefit of their employers, but for their own good, they should be employed in such a way as that their besetting temptation shall have no outlet. Indeed, considering the increasing number of cases of theft committed on the premises of masters by those under them, we make bold to say that much good would be gained to society if large employers, unacquainted with the signs by which human character is known, would pay a Physiognomist to examine every new servant employed, and report as to the peculiarities of the said servant's character.

In this essay we have to deal with that important element in character called "decision," and the Physiognomic signs by which it makes itself known. From the want of this trait of character springs a great deal of human misery. Without it, not very much of a lasting character can be accomplished. A wavering man is not to be depended upon. Stirred by mere impulse he may act well for a time, but discouragement and disappointment master him. Wavering is weakness; decision is strength. A man bereft of this element of character can scarcely look a strong decisive man in the face. Rousseau was a genius, and did much by flashes; but though he had rare intellectual abilities, when he came into the presence of the Scotch philosopher, David Hume, and that strong healthy boned searcher for truth calmly and steadily looked him in the face, the Frenchman trembled. It was the meeting of strength and weakness, a coming together of decision of character and moral hesitation; and Rousseau, who tells the story himself, says that he was so much impressed by the immovable Scotchman, and felt so acutely the unsteady nature of his own character, that he burst out and wept.

Any man who has travelled much in Great Britain must have noticed, so far as decision of character is concerned, the great disparity between the Scotch and the English. The former are cool and calculating, strong of will and full of purpose; the latter are politic, emotional and can be consistently denominated sagacious. Had an undecided man been at the head of the British Government in the latter part of 1872, his impulsive nature could not have out-lasted the stormy outside agitation for a republican form of government, which was causing so much disturbance in Britain; but the Scotch Gladstone, with the blood of the enduring mountain warrior in his veins, able to look through and through the agitation, calmly held the reigns of rule, unaffected by the desperate cavillings of prejudiced and selfish men. His mind was made up. He had purposed to carry the country through this agitation, as the wise and steady mariner guides his vessel through the storm; and those who are acquainted with his moral courage and decision of character, know that it is nearly or quite impossible for him to fail. An undecisive person says, "perhaps I may," and fails; the decided individual says, "I will," and succeeds. Some years ago a young man, belonging to the Scotch border, being out of employment, found his way to London. For some time after reaching the city he served a coal agent for half-a-crown a-day. During that time he was in the habit of going out at night and talking with the policemen on the streets. "How long have you been on the force?" he used to say to them, "Eight, ten, or twelve years," they would reply, just as the case might be. "And are you never to be promoted?" he would ask. "Perhaps we may and perhaps we may'nt," was the invariable reply.

The young man was struck with this oft recurring answer, and walking home to his lodgings one night, he made up his mind to join the police force, "and," said he, "once that is done, if I am not something more than a common police officer at the end of twelve months, I shall be disappointed." Accordingly he joined the force. Gradually his strong, staid, steady, decisive character became known, and he was promoted from one office to another, until now he stands at the head of his profession, has a princely salary, and travels often with the Queen. Ask him how he, a mere rustic, managed to push himself up, and he will tell you that it was by avoiding the "perhaps," and sticking firmly by the "I will" of decision.

Decision of character has three great principles underlying it. There is first an end to be accomplished; secondly, the obligation to accomplish it; and thirdly, will force to carry it out. Demosthenes, having noticed the influence of eloquence over his fellow-citizens, determined to be an orator, and that determination was developed into action. He was a stammerer, and resolved to master this defect, and did it. He went to a running brook, and placing a small pebble in his mouth, he delivered speeches to the unconscious banks, modulating his voice to the cadence of the rushing stream, and became the first orator of his time. Had he endeavoured to do those things without first having placed before himself an end, which he felt obligated to reach, and which he was conscious he had force enough in his will to reach, he would most certainly have failed, as many had done before him, and as many have done since his day. Cæsar determined to become the ruler of the Roman Empire, because of a conviction firmly rooted in his mind to the effect that there was no other Roman citizen so well fitted for it, and he succeeded. He first regaled the ears of the Romans with well thought out, cleverly arranged speeches, by means of which he became a state-officer; then, adapting himself to surrounding circumstances, he rose step by step until, from being commander of the Roman army, he grasped the Roman crown. Could a man of a wavering disposition have done this? Nay. Not only had Cæsar an end in view, but, considering the tyrannical rule of those in authority, he felt in his heart under obligation to pursue that end, conscious that there was will force within him before which obstacles must give way, and which would ultimately place him where it did. Napoleon I. was an ambitious man, and strong in his passions, but he had little steadiness or decision of character. Here he was weak; and not only was this apparent to others, he was conscious of it himself; and consequently, though elevated by his successes, when circumstances of an untoward nature pressed heavily upon him, he abdicated his throne and died in exile.

In the absence of the element of steady, overcoming decision, nations totter and fall, society becomes inconstant, families are unnecessarily oppressed, and individuals become footballs to their fellows. Without it no man can be trusted. To it Benjamin Franklin owed his greatness. By it, backed by his generals and private soldiers, old Abraham Lincoln, of precious memory, gave freedom to the slaves of the South. It was this element that conquered at Waterloo and made the Duke of Wellington immortal. The king who has it not becomes a tool to those beneath him, as witness the Georges of England; the subject who has it not may be called a swatheling or a proteus, for he is mastered by circumstances, and never sails but with the current. Analyze the French nation and ask why it was that they so signally failed in the late war against Prussia, and the only true answer you can get is, that from the throne downwards the people were living in their basilar natures, were weak of purpose, and had no decision of character Difficulties frightened them, disappointment brought discouragement, and the iron-willed Germans, with well-balanced minds, full of moral force and strong decision, shook them as a Newfoundland dog might be expected to shake a noisy little terrier.

We have spoken in a general manner of physiognomic signs of human character; *now*, let us ask particularly, what is that sign in the human body indicating the capacity of strong mental decision within? And here we may remark, that to judge the inner man by the outer, is a very natural process. There is nothing arbitrary in it. It is wholly reasonable. Indeed, there is no other way in which we can get to the mind save through the body. Phrenologists have seen this; but many of them blunder in their conclusions, because they confine their observations mainly to one part of man's organism, viz., the head, assuming, very erroneously, that the mind dwells there, and there alone. Now, we may as well sit down beside an Alpine mountain and expect to gather a perfect knowledge of the God of nature from its rocks, avalanches, and ice-covered peaks, as expect to read human character through the head alone. As the mind is diffused throughout the whole body, just as God lives in universal nature, so we must judge of the character of the mind, not by one particular part of the body only, but by all. As in nature, so in man, there is what may be called the law of correspondence. A flabby mind will have a flabby body, and, conversely, a flabby body will have a flabby mind. A well-constructed, firmly built, strong, enduring body may be expected to lodge a well-constructed, firmly built, strong, enduring mind. The inner acts upon the outer, and the outer upon the inner; and though we cannot tell how it is that mind acts upon body and body upon mind, nevertheless it is certain that just as one substance makes an impression upon another, so the mind acting through the body impresses the body, leaving marks, so to speak, by which an observant mind may not only recognize the fact of its acting, but come to conclusions regarding the character of its acts. Starting, then, with this principle, we ask, what is it in the body, known to us, which indicates decision of character within? And at this point we may notice more particularly than we have done, that decision of character is not simply determination, but that power by which determination is developed into action, carried out. In other words, decision is moral endurance. Now, there cannot be the slightest doubt that the capacity of endurance in a body depends upon the strength and compactness of its bones; not of one bone only, but of all. This need not be argued. So apparent is it to all, that we have merely to state the fact to have it admitted. Find us a man strong and vigorous of bone, and we shall shew you a man capable of endurance. During the time that the English railways were being made, it was remarked by all the contractors that the Scotch navvies were so much superior to the English, that two of the former could do as much work in the same time as any three of the latter, and generally they received higher wages. Now, why was this? The reason is not far to seek. The English workman who, by food peculiar to himself, makes more flesh than bone, has nothing like the enduring power of his northern brother, who lives in a land of cakes, and is more particular about making bone than flesh. The Englishman believes in bulk, but Sandy believes in compactness. Now, according to the law of correspondence to which we have referred, capacity of endurance in the body is a sign of capacity of endurance in the mind or soul; and as the body's capacity of endurance is dependent upon the strength, vigour, and compactness of its bones, so we are bound to come to the conclusion that well-formed, enduring bones in a man are signs to us that he has the capacity, not only of determination to act in a particular cause, but also that he carries within him the power of carrying out his determinations—that is to say, he possesses decision of character. (For farther explanation in regard to the Signs of Decisiveness, the reader is referred to page 141 in my *New Physiognomical Chart of Character.*) A man of stable bone is generally a man of stable character. He who makes bone early, lays the foundation of an honest, manly life. He who neglects this, will, generally speaking, become vacillating, and perchance may, in a snailish or imperceptible manner, merge into a harlequin. This is no mere theory without foundation in fact. He has read history backward who is not convinced of it, and cannot be called an observant man. Wellington, of whom we have already spoken, was not so large as many men, but his bones were of a large and more firm and enduring character, in proportion to his general bulk, than were those of Napoleon I., and, in consequence of this, he was more stable and reliable in his character than the ambitious, versatile Frenchman. Strong-boned people, though they may sometimes move slowly, always move surely, decide quickly, but are tardy in revealing their decisions, and even when "perhaps" slips from their tongues, the mind is saying, "I will," or "I won't." General Andrew Jackson had, perhaps, one of the most angular faces in America, and no man was ever firmer or more decided than he was. His solid parts preponderated over the softer; hence that solid, reliable, decided, and honest character for which he was so widely known and noted. Of course, there are exceptions to every rule, but generally you will find that the bones of a thief are of a very unenduring character. He excels in softness of construction; hence, when tempted, he is easily led astray. We once had an opportunity of studying the character of a thief. In the heart of this man there were desires for reformation, but as often as he resolved to be honest, so often did he violate his resolutions and fall. He seemed to have lost all power over himself, if ever he had any, so that theft had become his master. The smallness of his bones in proportion to the general size of his body, was as plainly marked as it possibly could be; and well do we remember feeling that, if that young man had been taught in his earlier years to look after solidity of body and brain form, instead of robbing society, he might, by a staid, solid mind, resolute, honest purpose, and searching, intellectual power, have made society his debtor, instead of being a weak, unstable, wavering wave of the great human sea, tossed about by every wind that blew around him. Wherever, then, you find men of weak, undeveloped, uncompacted bones, do not be astonished if they are inconsistent in affection, fickle in business transactions, changeable in their purposes, without moral stamina, and freakish and unwise in their judgments. The foundation they have laid, or which has been laid for them, does not possess endurance and capacity for holding out. What, then, must the structure be? What is it that gives stability and physical purpose and endurance to the mountain, but the hard, solid rock within; and from what, in man, may we infer decision of character, and power to hold out in honesty, straightforwardness, and manliness of life, if not from a preponderance of hard, solid, earthy, osseous matter in his organization.

It must not be inferred from what we have said that big men are necessarily honest, and small men necessarily thieves. Men of large bulk are often very small boned, and small men are often the reverse. But what we assert is this,—that, generally speaking, so general, indeed, as almost to amount to a law, it will be found that men, whatever be their general bulk, who have in their systems a preponderance of good, solid, osseous matter, are men who are large in the capacity of moral endurance, men to be trusted; men who, if other qualifications are present, are fitted for high, responsible situations; while, on the other hand, men who are wanting in osseous matter, in whose systems soft, flabby substance preponderates, are men without moral stamina, quite unstable, and altogether deficient in decision of character. That which would tempt the latter, and cause a fire in their lower nature, has little or no effect upon the former. It does not always thunder when it lightens; nor does it always rain when dark portentous clouds fill the sky. It is the soft elements in nature that deceive; and so is it among men. The hard, bony hand of the well matured mechanic rarely pilfers. Like others of a softer make he may be tempted, but before him is a high aim in life, to pursue which he feels under obligation, and for the accomplishment of which he is conscious of possessing sufficient will-power; and bringing that power to bear upon the temptation, he decides against it at once, his whole moral nature thundering "No." And in every victory he gains fresh strength. It is the soft, small boned street-loafer out of which cut-pursers, foot-pads, pickpockets, housebreakers, shoplifters, and all the rest of the light-fingered gentry are made. Healthy work they have never enjoyed—and idleness is the mother of vice. The man who does not work, especially when young, cannot be expected to be very strong-boned, and in consequence cannot be expected to be very particular in his morals. He may have a certain amount of polish in him, but like the soft-faced, sleek, polite Dr. Pritchard, of Glasgow, he would deprive a very near relation of life, if money could be made out of such sacrifice of a friend.

What a lesson we have here for parents! How often they neglect the bodies of their children, setting them to mental work before their minds have room to act. "Make body, my son, make body" was the advice given by Dr. Lyman Beecher, to his son, Henry Ward. The son took the father's advice. He spent much of the time during his early years in gardening, &c., and where will you find a stronger boned, more plucky, determined man in the wide, wide world, than the minister of Plymouth Church? *Industry* *is the father of honesty*, honour, and incorruptibility of character, because it develops and matures that part of the human system which is intended for hard, enduring action, firm, solid, well-compacted bone.

John Locke once said, that to have a sound mind in a sound body was the highest state of happiness conceivable. The old philosopher was right. But how is the sound mind to be got without the sound body? We do not mean to say that a man with a weak, unhealthy body is necessarily a bad man; but so far as we know, very few people would care about electing such to high offices, whether of Church or State. As a general rule, they have no confidence in themselves, and dare not take upon them heavy responsibilities. They are lacking in enduring bone, and consequently are lacking in moral decision and purpose. Demosthenes being asked what was the chief part of an orator, replied, "Action;" and what next? "Action;" and next? "Action." If you ask us how to make bone in your body, we give the Athenian's reply, "Action, action, action;" and if you ask how to secure decision of character, we have the same answer to give,—Work, work, work; and in doing so you are laying for yourself the groundwork of a noble character. Whereas if you are idle, you are losing in bone-power and firm endurance, which, transmitted inwards to the mind, results in indecision, moral delinquency, inconstancy of form, and an utter unfitness for any of those callings which require men with noble enduring purpose of soul. In the language of Shakespeare—

> "Do not for one repulse forego the purpose
> That you resolved to effect;
> Be stirring as the time; be fire with fire;
> Threaten the threatener, and outface the brow
> Of bragging horror; so shall inferior eyes
> That b'row their behaviours from the great
> Grow great by your example, and put on
> The dauntless spirit of resolution."

HUMILITY.

"You have that in your countenance which I would fain call master."
—SHAKESPEARE.

HUMILITY may be exercised toward God and toward man. In the former case it is a wise recognition of the true relations between the Creator and his creatures; but in the latter, it indicates a want of that true dignity which is based upon the brotherhood of the race. On this world's stage, where "all the men and women are merely players," acting in that character to which they have been appointed by the Great Manager of all, social humility is as out of place as social pride. Every true actor on the stage of life, like every genuine artist on the dramatic boards, plays well his role, whether it be that of a king or peasant, knowing this, that the peasant may be as necessary to the plot as the king, and that it is the acting which elevates or degrades the part.

It would appear at first sight that humility—involving, as it does, meekness, submission, and self-abasement—would be a state of mind from which all men would recoil, and to which they would only be reduced by the force of the most depressing griefs or the most imperious authority. In partial accordance with this view, we find that there are comparatively few people who are willing to be dominated in every domestic and public relation, who do not shrink, in other words, from a *universal* humility; but, on the other hand, the vast majority of mankind exhibit a marked inclination for humbling themselves on particular occasions, taking as much pleasure in the worship of their chosen heroes, as do the heroes themselves in the reception of their homage. Like the Earl of Kent, whom I have quoted in my motto, they are always finding some one whom they "would fain call master."

At the present stage of general enlightenment, and *a fortiori* in the past, the populace have needed, as well as demanded, great leaders, political, religious, and philosophic, to plan and direct their movements. As they were unwilling and unable to think for themselves, it was necessary that some one should think for them, else there could be no recognized law, no concert of action, and by consequence, no progress in civilization. The people, however active and industrious, are, as a rule, without plans for the future, and they therefore always surrender to the original thought that devises for them, and the mastering will that would rule them. To them the one thing needful is ease; and as they find it easier to be governed by others than to govern themselves, they readily resign their intellectual and political independence. Even in a professedly republican country, popular autonomy is almost unknown; the people not being governed by their own representatives, but by the representatives of half-a-dozen political leaders, assembled in a virtually private caucus. We may hope, however, that as the advance and diffusion of education awaken and discipline the popular thought, they may grow out of their present disposition to be gulled and subordinated by every species of demagogue, and may assume and enjoy the proud right of governing themselves.

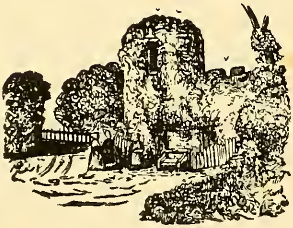
As an erect and even backward carriage of the head is the Physiognomical sign of pride, we might assume, *a priori*, what is confirmed by observation, that humility, which is the opposite of pride, would be indicated by a drooping of the head toward the breast. The ox, which carries his head forward and low, expresses his humility in his willing submission to the yoke, and the faithful industry with which he performs the bidding of his master. The horse, on the contrary, in common with all proud animals, bears himself loftily. The English, who are naturally a proud people, carry the head high.

When humility is not exaggerated into servility and meanness, it often gives to the address an engaging modesty, which expresses itself in unobtrusive and attractively deferential manners. Persons who have this modest estimate of themselves, together with a high regard for others, will naturally incline the head forward, as in the act of bowing. That the forward inclination of the body, whether expressed in the bow, genuflection, or prostration, is the natural sign of humility, is indicated by the customs of all nations. The Turks and Persians make their salaam by way of ceremony or respect; the Hindoos prostrate themselves before their idols and their social superiors; and among Christian nations, those who are meekly submissive to the Divine will, incline the head in the reverential act of prayer, or of returning thanks.

The strutting carriage is an evidence of pride; but those who stoop low in bowing, shaking hands, or speaking, are sober-minded and condescending. We naturally stretch the head toward the object of thought, and hence it is that pride carries the head from others towards self, because self is uppermost in the mind; while humility inclines the head toward others since they are *pro tempore* the predominant interest. When we wish to catch the strains of fine music, we naturally incline the ear with which we hear best in the direction of the sound, and so also we turn the eyes, and often the whole body, toward any object which we are eager to see. The student bending over his book is another instance of the natural tendency to incline the head toward the object of consideration.

In social life the affectation of humility—"the crooking the pregnant hinges of the knee, that thrift may follow fawning"—is one of the most odious and contemptible of all characteristics, while in religion it constitutes the sin of hypocrisy,—which is justly punished in the Mahommedan religion by the tortures of the lowest hell.

"The devil may grin, for his favourite sin
Is pride, that apes humility."



THE ORIGIN OF PHYSICAL, MENTAL, AND SOUL LIFE;

Or, The Origin of Mind and Body.

Nature is a vast field of physical life. Earth, air, water, and even animals and plants are full of living creatures, millions of whom, in the form of animalculæ, infusoria, and others of like character, are found floating in fresh and salt water. The air we breathe, the food we eat, the water we drink, and even the ink with which we write, has each its separate world of living beings, apparently formed for enjoyment, and as well provided for as any of the tribes of larger animals, or even man. It is being demonstrated by H. Carlton, Bastian, and other eminent physicists of Europe and America, that liquids, under certain favourable conditions, will develop organic life. In the experiments of these gentlemen, the liquids used for the purpose had been heated from two to three hundred degrees Fahrenheit, which is sufficient to destroy all previous life existing in them. They were placed in sealed, air-tight cans, yet after the space of twelve days, millions of living creatures appeared in the water, full of life and activity. This is tolerable evidence that life may be spontaneously generated under favourable circumstances. Now, if this is the fact in minute cases, why may not the vast oceans of our globe produce, under favourable conditions, the life called man? There seems to be no other method by which we can account for his existence on a scientific basis. The fabulous stories of antiquity, upon which modern superstitions of faith are based, need the scientific pruning which they are getting in this age of reason. According to this principle of creation, "God formed man out of the dust of the earth." The life-principle existing in nature, throughout ocean, air, and solid matter, was put into action, and particles of matter coarsely gathered together, and formed man. That first man was larger, coarser, stronger, and less mental than any race with which we are acquainted at the present day. The earth was in just the right temperature, age, moisture, electrical force, and magnetic spirit to produce the species called man.

As our earth became cooler, whiter races came forth, the result of the same great laws of life which are now active, but producing only small animals out of liquids, when heat, electricity, and light are favourable to such creations. We are candid in our opinion that the Negro race was the earliest created; then the dusky races at later periods, and last of all the white race. We are also firmly of opinion that the earth has not lost all her generative power, and that she will yet, under new conditions, form a still whiter race of men than ourselves, and far superior to all preceding races. The objection may be raised, that we cannot perceive the principles of spontaneous generation of life; neither can we understand the generation of the sexes, and many other facts in nature are equally unexplainable; though we do not understand them, still the facts remain. We cannot comprehend why silicic acid forms those beautiful crystals known as quartz; yet our ignorance detracts not one iota from the fact that they do so form. We see no hand guiding their sides or particles, neither could we have seen the hand of God, or anybody else guiding the material to form man. When the forces of nature, acting on liquids and solids, and impressed by light, electricity, moisture, &c., were set in motion, it needed none of man's imaginary assistance or superstitions to make man. When this globe was in a less pure and perfect state, long prior to the appearance of any human beings upon it, by certain hidden and mysterious laws, various multitudes of animals were produced, which were existing upon its surface when man first made his appearance. The creative laws are not, and may never be understood by us; but as certain unknown conditions will now spontaneously produce life, why may not the same causes have engendered it long ages ago, as well as now? As the mind is still finer and less tangible, it will be harder, by logic, to prove its origin. On man's first appearance, he had very little, if any mind; but as all nature tends to rise from the coarsest towards the finest, from matter towards mind, so she continued to unfold mind in man until he has now considerable powers in that direction; yet his present mental force is not nearly so great as it will be in the coming centuries. By taking a retrospective view of history, we find that all races were originally barbarians. The ancient Britons were savages; yet what brilliant talent and intellect now shines over all the hills and valleys of that "mother country." Mind is a creation from animal life, and just as much regulated by the same great natural laws as that which guided the creation of body life. Matter creates body, and body creates mind, and mind creates soul; and thus the great progressive scheme of nature goes on, step by step, rising higher and higher, becoming finer and more complex as it develops, until the eyes fail to perceive, or the thought to comprehend its creations or existence. Undoubtedly the soul will produce still higher forms of soul life, as time rolls onward to eternity. What in the future the offspring of soul will be, we cannot determine. The physical body is the organ of the mind, and the mind is the organ of the soul. Coarse bodies sometimes contain beautiful caskets and interior jewels, glittering and precious; so it is with the physical body. Disappointments, vexations, and sorrows produce or develop the beautiful interior mind, and the soul will naturally be still finer, and more beautiful and pure. Now, the encasement of mind is the physical body, and our soul works through our mental natures, consequently, it must live within its portals, the same as the mind dwells within the physical, and works through the same. The butterfly affords us an excellent example of three species of existence after the egg, through which state of life man passes, the same as all other transmitted life. First, we see a coarse, rough-looking worm, or caterpillar; then comes the chrysalis, significant of death in man; and last of all the beautiful butterfly. One inhabits the ground, after which it attempts to climb into mid-air on a tree, and last of all, it metamorphoses into a beautiful winged creature, and soars into the heavens as its residence. The first, lowest animal, or worm, represents the physical man, who attempts to rise into the air; but only when the bodily casket is cast off does the soul soar into space, and occupy the beautiful dream-land beyond. Feeble man, while clogged and loaded down with the gross material of earth, cannot comprehend those various conditions, or recognize the developments of nature, or the manner in which his conditions are susceptible of different phases, in a few moments of time. The soul of a child is evolved from the parental soul, as much as the body is an outgrowth from the parental body. There are some who have small souls as well as small bodies by inheritance, and it will require longer time in the future to develop them. Some inferior souls in children are caused by vexations, disappointments, sickness, and animal excesses of the parents, and those same inferior souls are improved by troubles, dieting the body, and silent grief and meditations. In order that all may become more gifted in bodily heritage, as well as in mind and soul, we would recommend a higher and better propagation of our species. There should, and eventually there will be, human exhibitions similar to the cattle and stock fairs of the present day, having for their object the advancement of humanity. As stock exhibitions are for the improvement of the domestic animals, so humanity shows should be for the improvement of ourselves. The physiognomical signs of a large soul by inheritance are large eyes; yet an individual may inherit a large soul, and it may be like rough ore, which is not useful until it has been heated and mixed, ground and powdered, and then transformed into useful metal. The man who has had many sad experiences, generally possesses a fine interior soul, which is large, because thus developed. When men have large bones and muscles, with small eyes, and can divest themselves of selfishness by close cultivation, they will eventually become the possessors of large souls. Selfishness cramps the soul to a pitiful degree. Future life can in no wise need selfishness, hence it would be to the soul like sand in a balloon; when they are cast out, both will rise. When generosity that asks no reward, veneration that bows with respect and commands respect, pure and undefiled love, conception of the beautiful, pity that soothes sorrowing anguish, and draws pity from those who are selfish, and the harmony that influences the quarrelsome to be ashamed of their degradation, and our higher nature thus predominates in all affairs, then the soul will grow into beautiful proportions, as these are the foundation of all the attributes of the soul. By the eyes we see the germ of a future existence; they are as a camera, or negative, which gives the expression of the future body or mind which encases the soul. We see by the various shapes and expressions in the eyes, the results in the mind and soul, and by tracing back those looks, we learn of the soul and its powers. The eyes are the organs through which most spiritual impressions are received. The other senses obtain it by contact, while the eyes are the principal media that give impressions to the mind of the external relation and soul of things, because they are connected with the whole universe of soul. The various faculties and powers of man will develop in the future state, being seen only in a diminutive condition here; yet various degrees of mind and soul may be recognized in their greater or less development in the persons who possess them.

PERFECTION OF CHARACTER.

COULD we rear children in such manner as to elevate the standard of mankind, would it not be a thought and work worthy even of saints?

If drunken husbands beget imbecile children (which is now an acceded fact), then sober husbands, with cool blood, are surely the most likely to produce offspring *compos mentis*, and having all their faculties developed in a higher degree of perfection than the offspring of the former class. Then if, as it appears to us to be no less an undoubted fact, the state of the parent is transmitted to the child, influencing and controlling his or her actions for a lifetime, why not observe those laws of sobriety and morality, and live by them to the good of unborn generations?

What would not many give to have a handsome face? A beautiful face is a good recommendation to most persons; yet there is a beauty which far exceeds all merely placid, smooth faces, and it is the peculiar and still more fascinating beauty of soul, which impresses itself upon the visage in all the most pleasant variations of thoughtful expression, conjoined with moral worth and purity.

That the children of some parents are a better type of mankind than either parent, is often seen in every day life. Certain combinations in father and mother will result in foolish offspring and those mentally depleted. Certain other conditions in marriage will eventuate in talented children. When brother and sister bring forth children as a result of marriage or incest, their children are almost certain to be fools. One case of incest occurred in Iowa not many years since, and the child was without brain or spinal cord, and an absolute idiot. This case came under the author's own observation, and the specimen was sent by him to Dr. Willard Parker, surgeon and lecturer to the College of Physicians and Surgeons in New York, where the author formerly attended medical lectures. Then, again, a sameness of blood or temperament is not conducive to a high type of offspring; but a German woman, belonging to a race noted for their good natures and strong constitutions, would make an excellent union with a nervous or excitable Yankee or Frenchman, at least so far as results go in producing more perfect samples of mankind than if both parents possessed the same nationalities and characteristics.

There is no study more important than this: how to make mankind more perfect. Then let no man or woman slight a single item conducing to this great work.

If a tall, raw-boned man were to marry a pocket Venus, as well moulded as Hebe, or pure as Lucrece, their children would, in all likelihood, be of medium height, and capable of accomplishing and enduring more than either parent.

Simple beauty of face does not indicate the highest organization. The most excellent organization is where all the bodily and mental parts act in harmony; where there is no diseased vital or weak mental organ; where excess is an entire stranger to the whole form; whose ruling power is the moral and intellectual instead of the animal. Such people are found not to have horrid or hideous faces, though they may not all possess the physical qualities of an Adonis or a Venus.

Men study, observe, and write books, and experiment, to teach and learn how to mix the various forms of horse-kind to obtain the most perfect animals. Cattle are yearly imported by dozens from Europe to mix with ours. They are varied in shape and blood, in order to improve the stock. Sheep-breeders are taking pains in every land to commingle various bloods, and also to perpetuate pure-blooded stock in its native state, that they may produce the greatest amount of wool or mutton as is most desired. The dog species are studied and fostered with great care, that they may be more perfect in every manner.

When men, as we see, study and apply their judgment to raising speed, meat, wool, and usefulness in animal life, why not apply equally the judgment and mind to learn how to rear useful human beings, as well as improve the race?

There can surely be no nobler aim than to go back to the first causes and try to adjust them, that nobler races and nations of men may follow us on a higher and purer sphere of action.

We, for our own part, firmly hold the belief that a nobler and purer race will yet spring from the present to fill our places when our children's children lie in dust beneath the clods of the valley. Creation of races is as much a fact at this period of our earth's history as it has been in any former age, only it is not by the ordinary observer noticeable, it works so slowly, but not the less surely.

When the laws of unity of the sexes are fully understood and applied by all mankind, then marriage will be so conducted and arranged by judgment, that happiness and well organized children will be a fixed certainty, and not the result of blind impulse, as too commonly is the case at the present day.

As man stands pre-eminently above all the brute creation, so becomes the more important this study of the laws leading to perfection in man. Thousands of dollars and hundreds of books are annually used in trying to make more perfect the animal kingdom, while only two books, at least of any consequence, have ever been written directly on the subject of marriage, with a view to human improvement. We refer to Walker's work, entitled *Intermarriage*, and *The Science of a New Life*, by Dr. Cowen, printed at Hartford, in Connecticut, which are the only works worth a fig ever written on the subject of improving the character of the genus *homo* previous to birth. Walker's book was printed in England, and can be obtained at many of our American book stores; and we heartily recommend its perusal to every lover of humanity, as well as the work by Dr. Cowen.

The questions naturally arise, "When can this great work of human improvement be best commenced?" and "How inaugurate this great reformation?" To the first query the reply should simply be "*Now, now* and *at once*." If a work of reform is worth notice, it can never be too soon begun. Every hour lost gives to the world more than 3,600 more imperfect human beings to grope and crawl on towards the grave, hardly able to sustain or help themselves, let alone the helping of their fellows. The answer to the last of the two questions should be given thus, the manner of reform should be that none but right marriages should ever be made. We would even go the length of saying that a law should be passed whereby those who are in any important degree unfit for the married state should not be allowed to enter into it. The law could specify how a committee could be appointed or elected, whose duty it would be to examine all parties purposing marriage, and to determine whether they were fit for the duties of matrimony. A male committee to examine men, for instance, and a female committee for women.

Horses and other animals are examined to determine their probable capabilities of producing good offspring; then why not examine men and women, with this greater and more important object in view—the elevation and improvement of our race. This plan of marriage should be based on somewhat the same principle as that on which men are admitted to the army or certain secret societies. They should be examined, and this examination regulated by law. We have no doubt that this would, on a fair trial, be found quite practicable, and would be of enormous value to all humanity.

The perfection of unity is harmony, and harmonious forms are the better calculated to bring forth offspring of that nature. They will give to the world children that can support themselves, and propagate in turn their own species.

Another very important matter arising out of what has been said, would be to rear men and women to have beautiful Physiognomies; but how shall we accomplish this very desirable result? There are faces that were they blended in their offspring, the children would be handsome though the parents might not be so in themselves; but the condition would most likely be such that the children would be moulded in a combination of their parents' features which would give them beauty.

What faces are those? You take this woman with a "pug" and that man with a Roman nose, and the child's nose is straight. A person with a Roman nose would very well do to marry a straight nosed individual, at least so far as noses are concerned.

All fair-haired people are, like light-coloured horses, tender in constitution and liable to consumption; and to avoid that they should mate with one of such a temperament that they will produce children who will have an organization of a different type; or such that the consumptive type will not be seen or exist in the children. A fair-haired person should, as a general rule, marry a black-haired person, or one with very dark hair; then their children would not be so apt to shew consumptive tendencies. Where fair-haired people marry, their children are usually of weak constitution. Red and black-haired people make a good combination to produce healthy progeny.

People with the same colour of hair may have opposite forms, so do not judge that when the colour of hair is the same it must follow that the forms are alike, for who has not seen many a man of the Brain and Nerve form with brown hair? who but has also seen such hair accompanying each of the other forms?

The build of the body is a better index to the forms than colour of hair or eyes.

If marriages were conducted wholly on the scientific plan advocated, there would be less cause for places of protection, such as asylums, prisons, and schools of correction; as human beings would be produced of a higher standard. who could control themselves, and possess the finest Physiognomies as an evidence of self-control and perfection of character.

Many marriages are happily made so as to produce perfect natures; but by wrong living and eating the systems of the parents are so impaired and thrown out of balance, that harmony in the nature of their offspring is entirely wanting.

If one parent has one point in the face small or weak, the other parent should have that point full or large, then the child would be neither deficient nor excesssive in this respect; so all the points in Physiognomy which are excessively strong in one parent should be less strong in the other, so as to be counterbalanced.

If the man has a very large mouth the wife should have a moderate or small mouth. Where the man has large eyes, ears, nose, hands, or feet, the wife should have them small or moderate in size to give good-sized and more perfect children in all their faculties than either individually possesses.

Before we can make ourselves perfect by improvement after birth, and even in manhood, we must observe several distinct conditions. We cannot efface a single faculty: but that is not necessary if it were possible.

The beautiful parrot, with his green plumage, may rub his feathers off and off again, and yet nature repeats herself in causing them to grow green again and for ever. The tiger may wish to have red stripes or green instead of yellow and black, and by rubbing (were it possible) erase the old spots; yet nature, ever true to herself, reproduces the same spots, not a tinge darker or lighter than before. The lovely lily may wish to be black instead of white or yellow tinted, and so swings its pendulous head against some rugged rock and darken its lovely face, but nature, with her inate principle of self-cure, sets to work to repair the damage, and in a few days the sombre shades have vanished, and again its natural sunny countenance beautifies the florist's paradise in all its naturalness and purity. So with the powers, abilities, inclinations, capacities, endowments, and qualities of man; we cannot efface a single faculty; we may smother and restrain, but cannot destroy a single instinct belonging to our natures. We can control one faculty by another, and all of them by the will, yet we have no power to rub out a single letter of the mind's alphabet.

Self-improvement consists not in destroying, but wholly in the proper use and restraint of our faculties.

The great intention of man's nature is that we should use all the gifts with which we are endowed, giving them a right aim and object, and avoiding the wrongful use or abuse of any of them.

It is impossible to change man's nature entirely, but some can be transformed so that it would be impossible to recognize them. We see the principle in many young men from rural life, who abide in the city for a few years under its grinding and polishing influence, and when they return to their country friends are hardly recognized. All exclaim, "How improved he is."

How to make this happy change for self-improvement is the great query for the world to understand. Patience is the grand panacea and the cardinal virtue. Yet all require to be taught as children are, little by little, and the surrounding conditions are such that it is impossible (or nearly so, while in those circumstances) for some to reform; but still there is hope, for if they will only try, the trying will work wonders.

First of all must be learned the great lesson, *what to eat and drink,* and a greater lesson, *to know what to avoid.*

Secondly, learn *how to think,* and towards what subjects to direct the mind, and from which to carefully guard the thoughts; or which thoughts to keep out of the mind. We cannot prevent bad thoughts entering the mind, any more than we can prevent birds alighting on our heads; but we can refuse to harbour the evil thoughts as we can prevent their building their nests there.

Thirdly, and *most important* of all is self-restraint and improvement, in learning how to govern our animal natures. It takes years for some people to learn to govern their temper!

There are those who never know the advantage of well-directed and cherished love! The terrible self-abuse which is prevalent in single as well as in married life, will have to be regulated by higher judgment, and then mankind will be able to rise in manhood. The way to make people think and act in this age is to advocate these ideas, and others will think of the arguments, others will adopt them, and others will refuse them; but it will grow. Some shower of thought will refresh them, and the wind will waft their fragrance through the earth, and the seeds will find lodging place in the ravines and valleys, and thousands will be improved by these ideas, and the world will be transformed into great gardens of perfection and harmony.

ÆSTHETICALNESS; OR, LOVE OF THE BEAUTIFUL.

> " A thing of beauty is a joy forever ; . . .
> Therefore, on every morrow, are we wreathing
> A flowery band to bind us to the earth."—KEATS.

THE Æsthetic faculty is that power of the mind by which we discriminate and enjoy the beautiful; whether it be exhibited in the world of sense or in the transcendent regions of the imagination. Everything which contributes to the pleasures of taste may be referred to the beautiful either in nature, in sentiment, or in art.

When thoughtfully analyzed, beauty is found to depend upon certain primary laws of symmetrical combination; in other words, it is discovered to have its basis in harmony, a truth which was long since caught by the classic writer who defined it as "multitude in unity." The disproportionate in nature may be terrific, grand, or grotesque, but it is never beautiful. The same is true in art, which in its highest aspiration, seeks only to give more definite and intelligible expression to the hidden *sentiment* in nature, so that they who run may read her divine handwriting. The beautiful in sentiment is also governed by this law of harmony, for no feeling that is extravagant or impassioned ever gives the impression of beauty to the mind. Even love, the most beautiful of all sentiments, becomes in its intenser forms no longer lovely. It is eager, heroic, impassioned; it leaps into the flames of ecstacy, and, thrilling with pleasure, it touches the confines of anguish; but in these, its more ardent phases, it is never harmoniously beautiful. When Othello explains to the assembled Senate—

> "She loved me for the dangers I had passed;
> And I loved her, that she did pity them."

We are touched by the beauty of the sentiment, but darker feelings stir us when, as an avenging demon, he rains kisses upon the sleeping wife he is about to murder.

> "One more, one more,
> Be thus, when thou art dead, and I will kill thee
> And love thee after:—One more, and this the last;
> So sweet, was ne'er so fatal, I must weep,
> But they are cruel tears."

This is not beautiful, for the soft harmony of tender feeling is disordered by passion. The expressions, a beautiful argument, a beautiful piece of machinery, are literally descriptive of the kind of charm which superior reasoning or mechanism often possesses, for the exquisite adaptedness of their various parts to the ends for which they are purposed, conveys to the mind the impression of harmony, and with it, of course, the delightful sense of the beautiful.

A great theologian has said, that nothing so impressed him with the goodness of God as the spontaneous gaiety of little children; but to most minds the same lesson comes home more deeply in that prodigality of beauty with which the Great Artist has embellished the heavens and adorned the turf.

It has been truly said that a circle is the most beautiful of all figures, and that the curving line is the line of grace. Hence the superior physical beauty of women: soft, pliant, and exquisitely rounded, it is her privilege by nature to exercise a "silent cheat," and "inspire a delightful prejudice." Man, on the contrary, is formed for strength rather than grace. His rough beard, like the lion's, clothes him with majesty, while firmness and daring breathe in his rugged and powerful frame. In his celebrated essay on *The Sublime and the Beautiful*, Edmund Burke carries out this idea of the beauty of roundness to its extreme limit. "Sweetness," he says, "is the beautiful in taste," and adds, with no little extravagance, "that this is owing to the fact, that the salt which is found in all saccharine substances is of a perfectly globular figure, and that these infinitesimal spheres, when rolled upon the tongue, communicate the same agreeable impression to the taste that marbles and other perfectly smooth and round bodies convey to the touch when softly revolved in the hand." It is a noticeable fact, that while the males of all animals are inferior to the females in that beauty which is born of the curving line, they are often their superiors in loveliness of colouring. Of this fact, the peacock, the common barn-yard cock, and the canary bird are familiar illustrations.

Beauty is given to woman that she may please and attract the stronger sex; but mere physical charms, while they may captivate the sense, are powerless to engage the devotion of the soul.

> "What is beauty? Not the show
> Of shapely limbs and features. No!
> These are but flowers
> That have their dated hours
> To breathe their momentary sweets, then go.
> 'Tis the stainless soul within
> That outshines the fairest skin."

Beauty has been quaintly said to "live with kindness:" devoid of intelligence and virtue, it is but an odourless flower which fails to *retain* the admiration it has won.

The love of the beautiful is scarcely less than a universal instinct, though it differs widely in different nations and individuals, in the strength as well as the correctness of its development. Its nobler forms of expression demand some of the keenest and finest mental perceptions, and are in consequence wholly unknown to those who are vulgar or stupid. The Indian displays the incipience of esthetic taste in his personal adornments—in his necklace of shells, his feather coronet, and his embroidered belt; but no chaste and classical volumes instruct and delight him; no works of art give beauty and dignity to his dwelling and fresh inspiration to his mind. The only real elegance about his home is the curling smoke that in matchless, though unnoticed grace, wreathes itself heavenward from his uncouth wigwam.

The esthetic faculty is indicated by the most prominent lineament of the face. When the nose is low, flat, and wide at the bottom part, as in the negro race, the love of the beautiful will be undeveloped, and the instincts sensual; but the reverse will be the case when this feature is thin and strongly directed outward, especially if it be a trifle raised at the point. The Chinese have broad and flat noses; and the poverty of their artistic *conception*, as compared with the skill of their *workmanship*, is the wonder of the world. In their ivory carvings they display faultless dexterity, cutting ball within ball, and garnishing each alike, but they are strangers to the sublime, acute, and poetic thought which the Hellenic mind personified in marble, and pictured on canvas. In the Circassian family the nose is particularly thin and elevated, and the esthetic faculty correspondingly developed. In music, architecture, and poetry; in sculpture, painting, and landscape gardening; and in the endless number of graceful designs which now adorn the simplest articles, and the most humble dwellings, the white race has strikingly exhibited its intense and cultivated love of the beautiful.

This faculty is always connected with a lively imagination, which, when combined with creative power, results in artistic and poetic genius. If the conceptions which the imagination presents to the mind are chaste, original, and striking, and are successfully expressed in works of art, these artistic creations will be as much more beautiful than ordinary nature as the ideal transcends the real. In describing the evanescence of beauty, Bacon compared it to "summer fruits which are easy to corrupt, and which cannot last." Socrates also portrayed it as "a short-lived tyranny;" yet in spite of its fleeting and fortuitous character, it has been always highly esteemed. Ovid considered it a favour bestowed by the gods; Plato called it a privilege of nature; and Aristotle maintained that it was superior to all letters of recommendation.

The love of the beautiful, like every other taste, is susceptible of cultivation. The perusal of that class of books which appeals to the esthetic faculty, the study of art, and the contemplation of nature, all conduce to its development. Even the arrangement of ordinary furniture, with a view to its agreeable effect to the eye, will quicken and improve the esthetic sense. The tourist is frequently disappointed by his first impression of the most noted scenes, and the first study of the works of art often rebukes the expectations of the critic; yet these natural and artistic beauties afterwards grow upon the feeling, and become, as it were, a part of the interior life. Studiously contemplated, they silently educate the sluggish taste, and by slow degrees inspire appreciation. It is only by thoughtful attention to the culture of this noble faculty that we can escape the earthward tendencies of our utilitarian age. Therefore, let us be studious to give it proper encouragement; so shall it lend elegance to our homes, and to our manners a more attractive grace.

ATTENTIVENESS.

"Friends! Romans! countrymen? lend me your ears!"—SHAKESPEARE.

THE line which I have quoted above, and which, as every school-boy knows, forms the introduction to mark Antony's oft-quoted speech in defence of Cæsar, is an acknowledgment of the fact that the orator harangues in vain, unless he secures the attention of his audience.

Attention is, indeed, a pre-requisite of all thought, but it may be consciously or unconsciously exercised. When it is awakened unconsciously, thought comes, as it were, unbidden, and is received and often utilized without the slightest sense of mental application. The majority of the intellectual impressions of our everyday life are instances of unconscious attention. Such also are the frequently sagacious views, the profound or poetic suggestions which men of genius so often receive by a kind of intellectual absorption.

Nevertheless, as a rule, it holds good that the most efficient attention is that which is the result of a determined and therefore conscious effort of application. This effort to apply the mind is one of the most strengthening, as well as the most useful of intellectual exercises. Every time the attention is determinately fixed upon a subject, the mind becomes more capable of concentrated thought; and, to that extent, more perfectly master of all its resources. The father of Sir Robert Peel, who received the political cognomen of Orange Peel, early designed his son for public life, and to that end accustomed him from childhood to make a verbal report of every kind of address, political, religious, or literary which he heard. To this training Sir Robert was indebted for the wonderful ability which he displayed in his Parliamentary career, of remembering almost verbatim the speeches of his opponents, so that he could take up their arguments, point after point, and reply to each in its original order.

Absent-mindedness is often regarded as the reverse of attention, but it is sometimes an extreme absorption of the mind, though in other interests than those which are directly and obviously presented to its consideration. In the case of deep thinkers, a degree of absence of mind is desirable as well as inevitable; for the world can ill afford to have men of this type diverted from their profound and useful reflections, to the comparatively petty interests of everyday life; yet for the vast majority of mankind, no advice can be better than that which Lord Chesterfield gave to his son—to pay undivided attention to that which he was about, whether he were listening, talking, studying, or observing. The advice was good, for the reason that there are few things so barren that they have not some outcome to the mind that is eager to perceive and to grasp it. This outcome ordinary people lose by inattention to their surroundings, while they have not sufficient concentration of thought to fix their minds effectively upon any subject which is foreign to the suggestions of their immediate circumstances.

The habit of attention to whatever is going on is absolutely essential to social success. Civility demands of us a ready response to the wishes and needs of others, but to know how and when to respond, we must be watchfully observant. For want of this watchfulness, many worthy and kind people fail to make themselves generally acceptable; while fops, profligates, and shallow-pated girls, who have cultivated a quick eye for the opportunities of social courtesy, are sought and admired for their charming and amiable manners. Nothing is more common in society than a wandering or indifferent eye under the infliction of conversation which is not desired, and this notwithstanding that nothing is more certain to be resented. He who listens to others, as though their conversation were delightful, flatters them far more than if he were to exert himself to talk delightfully to them.

The recognized sign of attention is a bending forward of the neck toward the object which engrosses the thought. Humility bends the head downwards by *curving* the neck, but in the act of attention the neck is directed forward in a comparatively straight line.

All great minds have a remarkable power of exclusive and earnest application. "Art," says the poet, "is long and time is fleeting," and hence, without persevering attention to some particular object or art, the finest natural talents will fail to accomplish great results. I once heard a lecture from Professor Parker upon the subject, "Monads, Mice, Monkeys, and Men," in which he said, as nearly as I can remember, that at first glance a dragon fly, spreading its splendid wings, appears a higher order of creation than a beetle, burrowing in the earth; but the repetition of abdominal rings, which the former presents, degrades its rank in the animal kingdom—shewing that airy flights will not compensate for the lack of concentration. The fable of the tortoise that, by its persevering industry, outstripped the swift but unpersistent hare, is a correct parable of human life. When Bayle, the laborious contributor to the *Dictionnaire Historique et Critique* was asked to explain his extraordinary productive power, he said, "Amusements, pleasure-parties, games, collations, trips to the country, visiting, and other recreations necessary—according to what they say—to many literary men have no place in my manner of life; I lose no time in them, neither do I spend any on domestic cares, or in interfering with anything, soliciting anything, or meddling at all with business. In this way, a writer may accomplish much." And in this way, I will add, any person may accomplish much. It is only by persistent attention to our chosen vocation that we may reasonably hope to achieve success.

PROOFS OF A FUTURE LIFE FOUNDED ON NATURE.

No amount of evidence under the canopy of heaven will convince a large class of individuals, if they are not in a condition to receive the truth. But, when affliction comes, the mind becomes subdued to calm reflection, and we receive those truths which in the bustle of life we rejected. The world thinks much about death and its results, but very little about life. Yet life is the most important of all things to man, for, as we live here, so we fit ourselves to enter into that second life beyond the grave, which we deem immortality. This life is only the nursery of the next world—a workshop in which souls are made and fitted for eternity. How important, then, is this life, and all which concerns it.

If our ideas are founded on the appetites, fashions, or education of people, we shall, and can only, give to the world something that is not founded in or true to nature.

For instance, that the Chinese live on excitants, and do a hard day's work, and seem to fatten upon it, does not prove that their way of living is the true one, or in accordance with Physiological laws.

Or, if the Indian starves, and then feasts for days together, it does not follow that his method or habit of life is a correct one.

So we shall find that a majority of our actions, our manner of living, style of dress, and even our creed or belief are based upon education and fashion. Because our neighbours do thus, and therefore we ought to follow their example, is too commonly assigned as a reason for human action. This policy is wrong, and the way to amend it is for every one to accept nothing, and teach nothing, which cannot be proved from nature.

The fact of a future life can be proved from nature, as well as it can by revelation, and the way to prove it by nature is in this manner. All organized things in creation possess life, and, under favourable circumstances, they will reproduce themselves, and the fact of their reproduction is proof positive that the seed has life, which we were unable to discover. Why may not man possess an unseen life, a living principle, which is to exist during all coming time?

Some have said if they could see a spirit they would be convinced of a spiritual life beyond the grave; but our eyes may deceive us when reason will not.

If we look into a vessel of water, it appears clear and pure, but the microscope reveals to us the fact that it is filled with numbers of animalculæ, which ordinary eyesight failed to perceive.

Place a straight stick in water, and, to the eye, it will appear bent at the point where the air and water meet; but our reason tells us it is not so, and that things are not always what they appear to the eye.

We learn by reason that the rays of light which strike the surface of water become intercepted, or caught up, as it were, in their passage through a denser medium, according and in proportion to the angle made by the rays of light and the surface of the material penetrated by those rays, which causes the object to appear crooked, so that the eye, which sees and follows the rays of light, perceives a bent stick which has no existence.

A man mining for gold in the Sierra Nevada mountains in California, broke open a rock, and finding some clear liquid looking like water, because it was pure and limpid, drank it. In a few hours the man was dead, and, upon examination, it was found his body was turning to stone. The clear liquid was silicic acid in solution, which, when crystallized, forms quartz.

Thus, we see, that our eyes are liable to deceive us; but reason, when rightly developed, is a much safer guide to a true belief than sight, hearing, taste, smell, or feeling, or any of our animal senses. If the sense of sight misleads us in common things, how much more probable to do so in the case of the immortality of the soul?

Much that is unseen is full of life and activity. The winds blow, but it is impossible for us to see the cause or power that put them in motion.

We are brought into existence in this world by a power that is unseen. A universal maxim in nature is,—"that nothing is destroyed." Now we possess something, yet we are unable to see it ourselves, to govern it ourselves, and it seems to be active without our assistance, and lives for a time, and then goes away. Some may say that because, on entering this state of existence, we did not know anything, therefore, on going out of this world we shall cease to live and know, and therefore there is no future for us.

This style of reasoning may be good enough for some, but it only amounts to supposition, founded upon the hypothesis that we do not know anything when our body is laid in the cold ground.

If we take a boy, or even a man, into a printing office, and tell him to go to work and print a first-class newspaper. Can it be accomplished? Certainly not!

So it is with an infant on entering this world, it has to learn like the boy in the printing establishment.

How was it discovered that man is to live in the future?

For almost every person possesses an innate feeling that such is the case. Nothing is made in vain, neither can anything be destroyed. When we attempt to destroy anything in nature, we only succeed in changing its conditions, and the conclusive reasoning is, that when man is said to die, he merely changes the form of his existence under other surroundings.

Continual change is the law of the universe, and nothing returns to what it was before. This may be denied by some, who would bring forth the illustration of water converted into steam, and then re-converted into water again, as evidence to the contrary. But this is on the same principle as when iron is heated and melted, it resumes its solid condition when cooled. Steam is rarified water, and the chemical condition of water has not been altered, and the iron is iron still, and the water, water.

But, if you burn a piece of wood, you change its state, or transform it into another substance entirely, and it is impossible, by chemical knowledge, to bring wood again from the residue.

So the body changes its condition to other conditions. We possess a something you may call by what name you please. As Shakespeare says—"A rose by any other name would smell as sweet." "What's in a name?" But give it mind or soul, and that mind or soul has a condition, and that condition demonstrates that it has various faculties, many of which are known by all people, and do not require proving.

We all have a sense of colour, time, decision, perseverance, love, and hatred, as all, whether savage or civilized, will admit. Now, these different faculties belong to one person, and that individual has an identity in this world, and as nothing can be transformed into another substance except by the process of nature, so it is equally impossible to change man except by natural law; and by the great controlling laws of his being, he is in time changed into another state of existence.

There are yet many other evidences which go to prove a life beyond the grave. All things are governed by some power, unseen by us, and that alone is foundation enough from which to argue a future. If He has power to bring us here, then He has the ability to produce as good a place as this for us, when we shake off this soul-depressing materiality.

One of the strongest evidences of immortality is, that man possesses a longing for a future life, as Cato, in his soliloquy exclaims—

> " Plato, thou reasonest well, it must be so,
> Else why this fond desire, this longing after immortality."

The innate feeling in every human being is, that he craves for a life in the future; and we find that all our wants are supplied with appropriate food in this world, except this one. Our faculties and desires find something in this life to answer to their several needs; for instance, we hope for a farm, and in a few years we possess it; but the desire for a future life is never gratified in this world.

It would be strange if God had made a mistake, and created an organ or impulse in man which can never be satisfied. It is conceded by all that everything is created for a certain purpose, although we may not be able to discover what it is; and if we know that there is a faculty in man which desires a futurity, then follows the conclusion that such a faculty must have an object, or life, in another state of existence.

Another view of the subject is embraced in the question, "Why were we created at first?" This query may seem absurd, but it is one that may be asked with propriety. Why are we brought to this earth? The answer is, because the results of nature were fulfilled in our production; or, in other words, nature required us to fill up a certain place in her repository or building of the universe.

Each one of us is nothing more than a brick in this temple of nature, and it requires all kinds to build it; so they are to be manufactured accordingly, some to one condition, some to another. So it is, when you are needed, some others will be also, and you will have to go and cannot help it, whenever the Great Builder requires you, to fill your position in the great life to come.

This comparison or deduction may seem strange, but it is simple, and can be understood, if we think a moment. The power that controls seems to be so distant, when we are in full health and strength, that we rarely give a thought to the subject.

The philosophy of a future life is very easily understood, if we only look at it in this light; but if you view it in any other, there is danger of being misled.

"Shall I be left, forgotten in the dust,
When fate relenting, lets the flower revive;
Shall nature's voice, to man alone unjust,
Bid him, though doomed to perish, hope to live?
Is it for this fair virtue oft must strive
With disappointment, penury, and pain?
No! heaven's immortal spring shall yet arrive,
And man's majestic beauty bloom again,
Bright thro' the eternal years of love's triumphant reign."

THE END.

COUNTWAY LIBRARY OF MEDICINE
BF
851
S48
1879